

Digitized by the Internet Archive  
in 2022 with funding from  
University of Toronto

<https://archive.org/details/31761115493918>













CANADA

Tariff Board

Report (by) of

# THE TARIFF BOARD

in Reference[s]

(Relative to the Inquiry Ordered

by the Minister of Finance

(respecting)

(**WIRE AND WIRE PRODUCTS**)



(**VOLUME 1**)

(Rod, Wire and Wire Products

(of Iron or Steel)



(**Reference No. 132**)

LIBRARY  
NOV 30 1965  
UNIVERSITY OF TORONTO









Report by  
**THE TARIFF BOARD**

Relative to the Inquiry Ordered  
by the Minister of Finance  
respecting  
**WIRE AND WIRE PRODUCTS**



**VOLUME 1**  
Rod, Wire and Wire Products  
of Iron or Steel



***Reference No. 132***



© Crown Copyrights reserved

Available by mail from the Queen's Printer, Ottawa,  
and at the following Canadian Government bookshops:

OTTAWA

*Daly Building, Corner Mackenzie and Rideau*

TORONTO

*Mackenzie Building, 36 Adelaide St. East*

MONTREAL

*Æterna-Vie Building, 1182 St. Catherine St. West*

WINNIPEG

*Mall Center Bldg., 499 Portage Avenue*

VANCOUVER

*657 Granville Avenue*

or through your bookseller

A deposit copy of this publication is also available  
for reference in public libraries across Canada

Price \$3.00

Catalogue No. FT 4-132/1

*Price subject to change without notice*

ROGER DUHAMEL, F.R.S.C.

Queen's Printer and Controller of Stationery

Ottawa, Canada

1965



## THE TARIFF BOARD

---

L.C. Audette, Q.C.	Chairman
G.H. Glass	First Vice-Chairman
F.L. Corcoran, Q.C.	Second Vice-Chairman
G.A. Elliott	Member
E.C. Gerry	Member
Léo Gervais	Member
A.DeB. McPhillips	Member

J.E. Gander	R.F. Lalonde
Director of Research	Secretary

---

## PANEL FOR THIS INQUIRY

G.H. Glass, Presiding  
E.C. Gerry  
A.DeB. McPhillips

---

Economist: J.W. Morrow, Assistant Director of Research







The Honourable Walter L. Gordon, P.C., M.P.,  
Minister of Finance,  
Ottawa, Ontario

Dear Mr. Gordon:

I refer to Mr. Nowlan's letter of November 2, 1962, in which he requested the Tariff Board to conduct an inquiry respecting wire and wire products.

In conformity with Section 6 of the Tariff Board Act, I have the honour to transmit Volume 1 of the Report of the Board, in English and French. This volume relates to rod, wire and wire products of iron or steel. A copy of the transcript of the proceedings at the public hearings accompanies the Report.

The second volume will deal with wire and wire products of non-ferrous metals.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "D. C. Audette". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Chairman





TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	11
THE PRODUCTS, THE PRODUCERS, AND THE PRINCIPAL ISSUES	15
STEEL WIRE RODS	22
The Market	26
Factors Contributing to the Rise in Imports	31
Proposals	41
Representations	43
STEEL WIRE	47
The Market	50
The Principal Proposals	55
Roping Wire and Core Wire	60
Other Round, Uncoated Wire	67
Round, Galvanized Wire	76
Round Wire with Coatings Other than Zinc	85
Wire Other than Round	89
STEEL WIRE ROPE AND STRAND	94
The Market	96
The Competitive Position of the Industry	100
Proposals	103
WIRE FENCING	105
Barbed Wire Fencing	105
Other Wire Fencing	109
WIRE NETTING AND WIRE CLOTH	115
Wire Cloth and Screening	116
Hexagonal Mesh Netting	120
Woven Netting for Fur Farms, and Welded Netting	121
MATERIALS FOR SPEEDOMETER PARTS	124
OTHER TARIFF ITEMS	126
Tariff Item 446m	126
Tariff Item 456	126
SUMMARY AND CONCLUSIONS	127
RECOMMENDED SCHEDULE	133
NOTES ON RECOMMENDED ITEMS	135
NOTES ON EXISTING ITEMS	143

---

TABLE OF CONTENTS  
(Cont'd)

	<u>Page</u>
APPENDICES	
I      Import and Export Statistics	155
II     Tariff History	213
III    Net Production in Canada of Hot-Rolled Steel Products	223



Explanation of Symbols Used

- Denotes zero or none reported
- .. Indicates that figures are not available
- \* In statistical tables, indicates a reported figure which disappears on rounding, or is negligible
- (a) A small letter in brackets denotes a footnote to a table
- (1) A number in brackets denotes a footnote to the text
- s.c. Denotes a Dominion Bureau of Statistics import or export statistical class





THE TARIFF BOARD

Reference No. 132

An Inquiry Respecting Wire and Wire Products

The text of the letter from the Minister of Finance, dated November 2, 1962, directing the Tariff Board to conduct an inquiry respecting wire and wire products is as follows:

"The Government has received a number of representations to the effect that the provisions of the Customs Tariff relating to wire and wire products are in need of review and revision in the light of developments which have taken place since many of the present provisions were introduced.

"I, therefore, direct the Tariff Board to make a study and report under Section 4(2) of the Tariff Board Act on tariff items in Schedule "A" of the Customs Tariff which relate to wire and wire products. It is my intention that this study should cover the following tariff items in their entirety:-

347b	353(d)	401(e)	402d	403(c)
348f	354d	401(f)	402e	403(d)
350	379c	401(g)	402f	403(e)
350a	379d	402	402g	403(f)
351	401(a)	402a	402h	403(g)
351a	401(b)	402b(1)	403(a)(i)	403(h)
351b	401(c)	402b(2)	403(a)(ii)	446m
351c	401(d)	402c	403(b)	456
				596a

The study should also cover tariff items 342 and 409e(3) in so far as they relate to wire.

"If the Board's study should indicate that amendments to the Customs Tariff are desirable, I would request the Board to prepare a revised schedule of tariff items with recommendations as to rates of duty."

This Volume of the Report deals with steel wire rod, steel wire, and certain products made from steel wire, as provided for in the following tariff items:

379c	401(e)	402b(2)	402h	403(f)
379d	401(f)	402c	403(a)(i)	403(g)
401(a)	401(g)	402d	403(a)(ii)	403(h)
401(b)	402	402e	403(b)	409e(3)
401(c)	402a	402f	403(c)	446m
401(d)	402b(1)	402g	403(d)	456
			403(e)	596a

Wire and certain wire products of non-ferrous metals will be considered in the second volume of this Report.

A public hearing before the Board was held at Ottawa from November 4 to November 8, 1963, inclusive, and from November 12 to November 14, 1963, inclusive. Representations were made to the Board by the following companies, associations and other interested parties:

Air Reduction Canada Limited, Montreal, Que.

British Wire Netting Export Group, London, England.

British Wire Rod Rollers' Association, Sheffield, England.

Canada Mink Breeders Association, Clarkson, Ont.

Canadian Electrical Manufacturers Association, Toronto, Ont.

Canadian Federation of Agriculture, The, Ottawa, Ont.

Canadian Importers Association Incorporated, Toronto, Ont.

Canadian Pulp and Paper Association, Montreal, Que.

Copperweld Steel Company, Pittsburgh, Pa.

Council of Forest Industries of British Columbia,  
Vancouver, B.C.

Dominion Steel and Coal Corporation Limited, Montreal, Que.

Electronic Components Manufacturers:

Audio Transformer Company Limited, Waterloo, Ont.

Automatic Coil Manufacturing Limited, Toronto, Ont.

General Instrument of Canada Limited, Waterloo, Ont.

Hammond Manufacturing Company Limited, Guelph, Ont.

RCA Victor Company Limited, Renfrew, Ont.

Smallwood, S.G., Limited, Kitchener, Ont.

Standard Television Products Limited, Kitchener, Ont.

Europam Corporation Limited, Montreal, Que.

Ferro Enamels (Canada) Limited, Oakville, Ont.

Fisheries Council of Canada, Ottawa, Ont.

Fourdrinier Wire Cloth Manufacturers:

Capital Wire Cloth Limited, Ottawa, Ont.

Johnson Wire Works Limited, Montreal, Que.

Niagara Wire Weaving Company Limited,  
Niagara Falls, Ont.

Institute of Iron and Steel Wire Manufacturers,  
Manchester, England.

Irving Wire Products Limited, Calgary, Alta.

Johnson Matthey and Mallory Limited, Toronto, Ont.

Lundy Fence Company Limited, Toronto, Ont.

Marsland Engineering Limited, Waterloo, Ont.

McLaren, J.C., Belting Company Limited, Montreal, Que.

Mechanical Spring Manufacturers:

Bohne Industries Limited, Toronto, Ont.

General Spring Company Limited, Montreal, Que.

Hall Industries, St. Marys, Ont.



Hamilton Wire Products Company Limited, Hamilton, Ont.  
 Hi-Bek Precision Spring Company, Hamilton, Ont.  
 Hyde Spring and Wire (Canada) Limited, Brantford, Ont.  
 Premier Spring and Manufacturing Limited, Ayers, Ont.  
 Steele Brothers (Guelph) Limited, Guelph, Ont.  
 Steele's Wire Spring Limited, Guelph, Ont.  
 Wallace Barnes Company Limited, Hamilton, Ont.  
 Wallbank, P.J., Manufacturing Company, Plattsville, Ont.  
 Mercury Wire and Nail Company Limited, St. Hyacinthe, Que.  
 Morrison Steel and Wire Company Limited, Vancouver, B.C.  
  
 National-Standard Company of Canada Limited, Guelph, Ont.  
  
 Perfection Automotive Products (Windsor) Limited,  
 Windsor, Ont.  
  
 Quebec Asbestos Mining Association, Thetford Mines, Que.  
  
 Robertson, P.L., Manufacturing Company Limited, Malton, Ont.  
 Rubber Association of Canada, The, Toronto, Ont.  
  
 St. Lawrence Steel and Wire Company Limited, Gananoque, Ont.  
 Sivaco Wire and Nail Company, Marieville, Que.  
 Society of Chain Link Fencing Manufacturers,  
 Sheffield, England.  
 Steel Company of Canada Limited, The, Hamilton, Ont.  
 Sterling Cables (Canada) Limited, Montreal, Que.  
 Stewart Warner Corporation of Canada Limited,  
 Belleville, Ont.  
  
 Tinsley Wire Industries Limited, Sheffield, England.  
 Titan Steel and Wire Company Limited, Vancouver, B.C.  
  
 United Nail and Foundry Company Limited, St. Johns, Nfld.  
 United Wire Works Limited, Edinburgh, Scotland.  
  
 Vanadium-Alloys Steel Canada Limited, London, Ont.  
  
 Webster and Horsfall (Canada) Limited, Three Rivers, Que.  
 Weldmesh, B.R.C., (1960) Limited, Vancouver, B.C.  
 West Coast Wire Works Limited, Vancouver, B.C.  
 Wire Cloth, Screening and Netting Manufacturers:  
     Donald Ropes and Wire Cloth Limited, Hamilton, Ont.  
     Greening Wire and Perforated Metal Company,  
     Hamilton, Ont.  
     Greening Metal Products and Screening Equipment Company,  
     Hamilton, Ont.  
     Tyler, W.S., Company of Canada Limited,  
     St. Catharines, Ont.  
 Wire Rope Manufacturers:  
     Anglo-Canadian Wire Rope Company Limited, Montreal, Que.  
     British Ropes Canadian Factory Limited, Vancouver, B.C.  
     Canada Wire Ropes Limited, Smiths Falls, Ont.  
     Dominion Wire Rope Limited, Montreal, Que.  
     Donald Ropes and Wire Cloth Limited, Hamilton, Ont.  
     Greening Wire Rope and Cable Company, Midland, Ont.  
     Wrights' Canadian Ropes Limited, Vancouver, B.C.  
 Wire Rope Export Conference, Sheffield, England.  
 Wirth Limited, Montreal, Que.





## The Products, the Producers and the Principal Issues

This part of the Report is concerned with the wire rod out of which steel wire is made; with steel wire and with rope, strand, fencing, netting and cloth made from steel wire.

Wire rod is a semi-finished, rolled steel product which is produced in coils. It is distinguishable both physically and in official statistics from other steel wire rods, such as those used for concrete reinforcing, even though they may be produced on the same machines. Most wire rod is used for drawing into wire; relatively small amounts are used for reinforcing concrete pipe, for the manufacture of chains and for a few other purposes. In the years 1962 to 1964 inclusive, the domestic disappearance of wire rod averaged 479,000 tons annually, and the production of wire averaged 400,000 tons, the difference having been due to consumption of rod for purposes other than wire drawing and to processing losses.

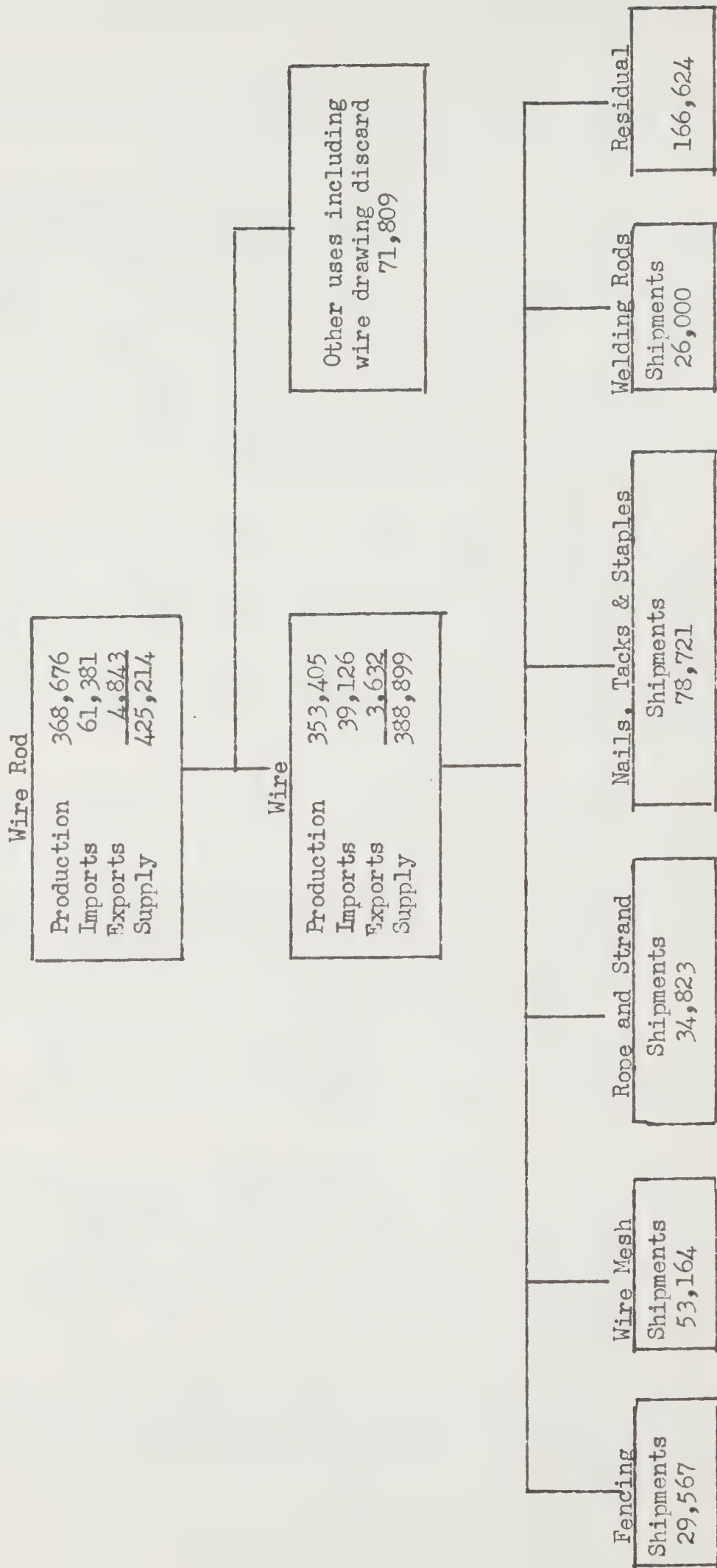
Information respecting some of the principal uses of wire during the years 1961 to 1963 inclusive, is contained in the chart on the following page. About 15 per cent was used in the manufacture of fencing and wire rope, smaller but undetermined quantities were used in the manufacture of netting and cloth; the remainder was used for a wide variety of other purposes. Large volumes of wire are used in the manufacture of concrete reinforcing mesh, nails and other fasteners and welding electrodes; there are also many other uses for which separate statistics are not available.

A summary of the available statistics of production, imports and exports of products in this part of the Reference is contained in the table on page 17. The statistics do not reveal the total value of Canadian production for two reasons. First, wire rod is used in the production of wire, some of which in turn is used in the production of rope, strand, fencing and wire cloth so that double counting is involved. Second, a significant part of the production of both wire rod and wire is retained for further processing by the producers. If account could be taken of these factors, the total value of production of products in this part of the Reference would probably be found to have been about \$100 million in 1963. And, as the table shows, imports were valued at \$24 million and exports at about \$2 million in the same year.

Wire rod constitutes approximately half by value of the total production of goods in this part of the Reference. The remainder is accounted for by the value added in converting rod to wire, and in converting wire to wire products. The cost of rod accounts for over half the selling price of most wire and wire products. An exception is wire cloth, in which case the cost of wire is usually less than half the selling price.

The Canadian market for wire rod and the wire made from it has been an expanding one. Between 1951 and 1964 the consumption of rod increased 70 per cent, and the consumption of steel wire increased by about one half.

DOMESTIC SUPPLY AND DISPOSITION OF WIRE ROD OF IRON OR STEEL, AVERAGE 1961-1963  
tons



Source: Based on D.B.S. Statistics



PRODUCTION, SHIPMENTS, IMPORTS AND EXPORTS OF STEEL WIRE ROD, STEEL WIRE  
AND CERTAIN WIRE PRODUCTS, BY SELECTED YEARS

Product	Year	Production (tons)	Canadian Factory		Imports		Exports	
			Shipments (a) (tons)	(\$'000)	(tons)	(\$'000)	(tons)	(\$'000)
Wire Rod	1951	318,266	122,514	9,695	8,322	1,001	336	64 (b)
	1956	403,834	403,602	42,565	14,220	1,557	2,133	226 (b)
	1963	386,851 (b)	390,851 (b)	50,460 (b)	75,740	7,148	6,072	791
Steel wire	1951	294,373	118,906	18,946	41,913	9,679	..	294
	1956	366,486	185,887	34,694	44,363	11,052	..	88
	1963	384,640 (b)	181,438 (b)	37,000 (c)	40,559	10,879	4,468 (d)	1,076 (d)
Steel wire rope and strand	1951	31,053	32,283	17,446	..	1,578	..	138
	1956	..	40,588 (b)	22,491	..	2,580	..	408
	1963	..	38,355 (b)	21,863 (c)	7,552	3,397	922	473
Steel wire fencing, including barbed wire	1951	32,667	32,061	5,680	..	462	..	8
	1956	..	27,151	5,822	..	940	..	4
	1963	..	30,614 (b)	6,589 (c)	8,442	1,184	..	..
Wire cloth, including insect wire screening-steel, including stainless steel	1951	..	..	..	..	671	..	221
	1956	..	..	2,913	..	1,010	..	150
	1963	..	..	3,000 (c)	902 (e)	1,057 (e)	..	..
TOTAL	1951	..	..	..	..	13,391	..	825
	1956	..	..	..	..	17,139	..	876
	1963	..	..	..	133,195	23,665	..	..

(a) In the cases of rod and wire the shipments include substantial intra-firm shipments

(b) Preliminary

(c) Estimated

(d) Includes barbed wire

(e) Includes non-ferrous wire cloth

Source: D.B.S. except where otherwise indicated

Virtually all the Canadian output of steel wire rod is produced by Dominion Steel and Coal Corporation and the Steel Company of Canada Limited, hereinafter referred to as Dosco and Stelco respectively. Atlas Steels Company Limited produces stainless steel wire rod, but the market for this product is extremely small in relation to the market for the other grades.

Dosco and Stelco retain by far the greater part of their output of rod for processing into wire; together they account for three fourths or more of total Canadian production of wire. They also retain a considerable proportion of their output of wire for processing into a variety of wire products. They account for well over half the Canadian output of wire fencing, and they are leading producers of other wire products such as nails and other fasteners, concrete reinforcing mesh and welding electrodes.<sup>(1)</sup> A spokesman for Dosco estimated that about one quarter of the value of the company's total production of all products fell within the scope of the present Reference. In the case of Stelco the proportion is less because of the large tonnage of flat steel products which it produces; however, in terms of both quantities produced and range of products Stelco is the largest producer of products falling within the scope of the Reference.

There are some fifteen manufacturers of wire other than Dosco and Stelco. They are unintegrated in the sense that they must either obtain their wire rod from Dosco or Stelco or import it. They retain most of the wire they produce for their own use in the manufacture of nails, concrete reinforcing mesh, welding electrodes and a few other products, although some of them do offer wire for sale. In nearly all cases they are in competition with Dosco and Stelco in sale of their finished products. Measured by the combined value of their sales, the interest of the unintegrated wire drawers in the Reference is smaller than that of Dosco and Stelco; on the other hand, many of them are largely or entirely dependent on sales of wire or wire products, and consequently the tariff arrangements relating to rod, wire and wire products are of vital concern to them.

Wire rod in most sizes, when for use in the manufacture of wire, can be imported duty-free or at a very low rate of duty, (\$3.00 per ton), and in recent years imports by the unintegrated wire drawers have been substantial. Dosco and Stelco complained about these imports and proposed that the duties on them be increased to the level provided for other bars and rods. This proposal was opposed by many of the unintegrated wire drawers.

There are 17 tariff items in the Reference which relate to steel wire, many of them providing duty-free entry or low rates of duty on particular kinds of wire for specified purposes. Nearly half the total volume of wire imports consists of roping wire entered under an end use item; imports of galvanized wire for fencing and other uses, duty-free or at low rates of duty, have accounted for about one fifth of the total volume of wire imports. Dosco and Stelco proposed a major revision of the wire schedule which would involve the elimination of most of the end-use items. A wide variety of interests would be affected by such a revision and many made representations to the Board.

---

(1) Welding electrodes are not produced by Dosco



Products made from wire which are included in the Reference are produced and sold under a wide variety of circumstances. At issue are the rates of duty on these products and the relationships between those rates and the rates on wire, both existing and proposed.

Wire rope and strand are produced principally in seven plants, using high tensile wire as a raw material. The wire rope manufacturers import the greater part of their requirements of such wire.

Wire fencing consists principally of barbed wire, farm fencing, chain link fencing and lawn fencing. While Dosco and Stelco account for well over half of total Canadian production, ten or more of the unintegrated companies also produce fencing. Wire for the manufacture of fencing is nearly all galvanized, and Dosco and Stelco are the only companies in Canada with what might be termed full scale wire galvanizing facilities capable of producing the range of sizes and qualities required in fencing. The unintegrated fencing producers either obtain their galvanized wire from Dosco or Stelco or else import it duty-free under an end use tariff item. Most types of fencing are bulky to ship, and imports have generally been small. An exception is barbed wire fencing, which can be packed in coils; imports of barbed wire fencing have been supplying a large part of the market, and the principal producers sought increased protection on it.

Wire cloth and wire netting of iron or steel, as the words are used in the Customs Tariff, consist principally of a variety of industrial cloths and screening fabrics, insect screening, and hexagonal mesh netting, otherwise known as poultry netting. There are four firms which specialize in the manufacture of industrial cloths and screening fabrics, and one of these firms also manufactures hexagonal mesh netting.

The number of persons employed in the production of products falling under this part of the Reference is estimated at about 6,000. Of these, about 900 were employed in wire rope plants and the remainder were employed in the production of steel wire rods, wire, fencing, netting and cloth. In the case of wire rod, the estimate takes account of employment provided in Canada at all stages of production, including the mining of coal and iron ore and the production of primary steel. Even including the mining stage, total employment is not large considering the substantial tonnage involved and the various stages of processing through which it passes. It might be noted, moreover, that the employment content is relatively much higher at the later stages of fabrication of products, for example, in the production of cloth netting and the finer wires.

Over half the employment provided by the manufacture of all these products is in Ontario. This is true of each of the product groups with the exception of wire rope, in which case Ontario accounts for about one third of the total employment. Most of the balance of the employment in the manufacture of these products is in Quebec, Nova Scotia, and British Columbia.



## External Factors Contributing to Steel Imports

Imports of certain products falling under this part of the Reference, notably steel wire rod, galvanized wire and barbed wire fencing, reached substantial proportions over the past few years. In the case of each of these products there existed particular circumstances which favoured imports and which are described in the relevant sections of this part of the Report. In addition, however, there have been significant changes of a more general nature in the world market for steel since 1950, which have affected the levels of these imports, and these are touched upon below.

In the 1940's there was a world shortage of steel, but since then capacity has increased more rapidly than consumption. Between 1953 and 1962 world capacity increased by 70 per cent, or 6.4 per cent annually, while consumption only increased by 55 per cent, or about 5 per cent annually. Of the major trading areas, the increase in capacity in the European Coal and Steel Community (E.C.S.C.) was 70 per cent, in Japan about 400 per cent, in Great Britain 40 per cent and in the United States 25 per cent. In 1962 there was considerable idle capacity; of total capacity about one third in the United States, 28 per cent in Great Britain and 11 per cent in the E.C.S.C. and Canada, was idle.

However, domestic prices in Great Britain and the United States -- and in Canada -- remained fairly steady despite this excess capacity. In the E.C.S.C., on the other hand, while the burden of excess capacity was relatively light, a number of factors combined to exert downward pressures on prices. The results were a sharp decline in E.C.S.C. prices between 1960 and 1963, and very strenuous efforts to increase exports.

In addition to these developments, there is a particular characteristic of the steel industry in Europe which has also had a bearing on imports into Canada. Whereas most steel capacity in the world consists of open hearth furnaces or the newer oxygen converters, some 40 per cent of E.C.S.C. capacity consists of what are known as Bessemer converters in which Thomas quality steel is produced. Thomas quality steel is normally sold at between \$10 and \$15 per ton under open hearth steel, and it is only acceptable in North America for certain uses. Thomas quality wire rod is, however, acceptable when for use in the manufacture of wire for nails, concrete reinforcing mesh, some kinds of fencing including barbed wire, and certain other products not calling for the highest quality.

Finally, in addition to increases in primary steel capacity in Europe and elsewhere, a large amount of finishing capacity has been installed; for example, by far the greater proportion of rod production in Europe comes from mills of recent construction and of the most modern design. Spokesmen for Dosco and Stelco at the public hearing recognized the need to match European technical efficiency. Dosco has just completed a new rod mill, and Stelco has announced plans for one.

It would appear, then, that aside from the fact that Thomas quality steel is acceptable for use in the manufacture of certain wire products, two other factors relating to European steel affected the

level of imports into Canada of steel wire rod and certain wire products in recent years. The first was a decline in European prices. The second was the increased efficiency of European rod rolling mills.

It appears, however, that European prices reached a low point at about the time of the public hearing in November, 1963. Early in 1964 the countries of the E.C.S.C. raised their external tariffs on wire rod to 10 p.c.; previously the duties had ranged from averages of about 6 p.c. in Belgium/Luxembourg to 9 p.c. in Italy. This action would tend to have a firming effect on European prices and, consequently, on prices for export to Canada. In fact, whereas at the time of the public hearing wire rod for export was quoted, f.o.b. Antwerp at \$U.S. 75 per metric ton; by the end of 1964 the price exceeded \$U.S. 90 per ton. In addition, the demand for steel was strong in 1964 and, despite further increases in capacity, steel producing facilities were more fully utilized. In Canada the problem was one verging on shortages rather than excess capacity. Nevertheless, with the increases in efficiency and capacity in Europe and elsewhere, conditions in world markets will certainly continue to be more competitive for some time to come than they were, for example, in the late 1940's and early 1950's.



## Steel Wire Rods

Carbon steel wire rods have been defined in the following terms:

"Wire rods are hot rolled from billets to an approximate round cross section. They are produced in coils of one continuous length. Wire rods are not comparable to hot rolled bars in accuracy of cross section or surface finish because of the methods of manufacture. Wire rods are a semi-finished product and are intended primarily for the manufacture of wire".<sup>(1)</sup>

The present Reference is concerned with steel wire rods as specified in the following tariff items:

		<u>B.P.</u>	<u>M.F.N.</u>
379c	Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, when imported by manufacturers of wire for use in the manufacture of wire, in their own factories.....per ton	Free	\$3.00
379d	Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, when imported by manufacturers of wire fencing for use in the manufacture of wire for wire fencing...per ton	Free	Free

It is estimated that four fifths or more by weight of the wire rods used in this country are within the range of diameters and for the uses specified in tariff items 379c and 379d. The remainder consists of larger diameter rod required for the manufacture of the coarser sizes of wire, and of rod of any diameter used for other than wire drawing. These rods are dutiable under tariff item 379 at 5 p.c., B.P. and 10 p.c., M.F.N.

Much of the rolling mill plant in Canada used for the production of wire rods is also used for the production of certain other rolled products. As a consequence, the capacity of Dosco and Stelco to produce wire rods at any point in time depends upon what tonnages of these other rolled products they decide to produce.

Stelco produces most of its wire rods in its rod mill at Hamilton. At the public hearing in November, 1963 the spokesman for Stelco placed the capacity of this mill at 360,000 tons per year, about 85 per cent higher than in 1950. However, in addition to wire rods, a considerable tonnage of round concrete reinforcing bars is produced in the same mill. Stelco also devotes a small proportion of the capacity of one of its bar mills to the production of wire rod.

<sup>(1)</sup> Steel Products Manual: Wire Rods, Carbon Steel, American Iron and Steel Institute, December, 1963, New York, page 23



At the time of the public hearing, Dosco had a rod mill at Sydney with a rated capacity of 193,000 tons which was used exclusively for the production of wire rods. The mill is only capable of producing wire rods in what might be termed small and medium sizes, and is not capable of producing the full range of sizes specified in tariff items 379c and 379d. Wire rods of larger sizes are produced in a bar mill at Sydney which is used principally for the production of a variety of other steel products.

Actual Canadian production of wire rods amounted to 387,000 tons in 1963 and 445,000 tons in 1964, which was the largest tonnage ever produced in one year. Given the commitments of the steel companies to produce concrete reinforcing bars and other products, and taking into account the sizes of wire rod which were most in demand, it is unlikely that the steel companies could have materially increased their production of wire rod in 1963 or in 1964.

Early in 1965, Dosco completed a new rod mill near Montreal which will be capable of producing a variety of rolled products including wire rod, and will eventually have a capacity of 450,000 tons annually. Stelco has announced its intention of building a new mill at Hamilton to produce wire rods and round bars. The existing rod mill will thereafter be devoted to the production of reinforcing bars. Altogether a substantial increase in production of round rolled products is in prospect.

Wire rods are semi-finished steel shapes which are among the products rolled from steel billets. While total production of hot-rolled steel products rose from approximately 2.9 million tons in 1951 to 7.4 million tons in 1964, over the same period the production of wire rods rose from 318,000 tons to 445,000 tons. Thus, as a percentage of total output of hot-rolled products, production of rods declined from 11.1 per cent to about 6 per cent. However, when the new rod rolling facilities now completed or planned are in full operation, output of wire rod will undoubtedly increase significantly.

The billets from which wire rods are rolled are one of the shapes of steel resulting from the earlier stages of steel production, namely:

1. The mining of coal, iron ore and limestone. Both Dosco and Stelco mine their own limestone in Canada, and Dosco mines its own coal as well as much of its iron ore. With the development of new iron ore deposits in Canada, Stelco will soon be obtaining a large proportion of its iron ore in Canada.
2. The smelting of iron ore in blast furnaces to produce pig iron.
3. The production of steel in open hearth furnaces from pig iron and steel scrap.
4. The pouring of steel ingots, stripping them from moulds, and soaking them for controlled cooling.
5. Rolling into blooms.

Some of the blooms are rolled into billets which are then rolled into wire rods and other steel shapes.

The costs of producing wire rod in Canada are, of course, confidential, but some of the orders of magnitude involved can be gleaned from published data. While only a small proportion of the wire rods produced in Canada is sold on the open market, prices are generally in the range between \$100 and \$150 a ton, f.o.b. steel plant, depending upon quality, competition and other factors. The average value of factory shipments, including intra-company shipments, was \$129 per ton in 1963.

The largest element of cost is the acquisition and assembly at the steel plant of the coal, iron ore, scrap metal, limestone and all the other materials used in the production of steel. Judging from statistics of materials used as published by the Dominion Bureau of Statistics, the ore, coal and other raw materials entering into the manufacture of a ton of steel appear to have cost an average of about \$45.00 in 1961.

The amount of labour involved in converting these raw materials into wire rod amounts, in the case of Stelco, to about eight man-hours, per ton of rod.(1) At current wage rates, this would cost about \$25.00.

Capital, much of it invested in plant and heavy machinery, is a large item of expense for the iron and steel industry. In 1962, for every dollar of total assets after depreciation invested in iron and steel mills, sales amounted to only 95 cents; the average for all manufacturing industry was \$1.46 in sales for every dollar invested. The allocation of this and other overhead costs as between the various products of the industry is highly variable, and is not attempted here.

At the public hearing, neither Dosco nor Stelco contended that they were at any competitive disadvantage internationally with respect to acquisition of raw materials. Canada is a net exporter of iron ore; while Canada imports bituminous coal from the United States, this is also true of Japan. On balance, the disadvantages of the Canadian industry with respect to acquisition of raw materials would appear to be either nil or small.(2)

On the other hand, the hourly costs of labour are considerably higher in Canada than in Europe and Japan, from whence most imports of wire rod have come. A spokesman for Dosco presented statistics showing that hourly employment costs in steel making in Japan and various European countries were from one-fourth to one-half those in Canada. As already indicated, however, labour costs are not the principal element of cost at this stage of manufacture.

(1) At the public hearing a spokesman for Dosco reported that 17.8 man-hours of labour were expended in the production of each ton of wire rod. In arriving at that figure, he included the labour involved in the production of coal and iron ore at the company's own mines in Canada

(2) This subject was treated at considerable length by the Board in its report, Basic Iron and Steel Products, Reference 118, Ottawa, Queen's Printer, 1957



The Canadian industry is probably under some cost handicap in the procurement of plant and equipment, although much of the machinery and equipment for the production of pig iron and steel ingots is provided for in the following tariff items which have relatively low rates of duty:(1)

<u>Tariff Item</u>	<u>B.P.</u>	<u>M.F.N.</u>
410b	Free	10 p.c.
410g	Free	5 p.c.
410p	Free	Free

Machinery for processing beyond the pouring of steel is dutiable under a variety of tariff items, with rates as high as 22½ p.c., M.F.N.

Wire rods are heavy in relation to their value, and transportation charges on imports from overseas usually add from ten to fifteen per cent to the cost of the rod. These costs are partly offset by internal shipping costs on the domestic product, which are very substantial on shipments to the West. However, in its study of the iron and steel industry in 1957,(2) the Board found that freight costs had been an important factor in assisting the Canadian industry to retain the domestic market for many kinds of steel.

The recommendations of the Board at that time, most of which were subsequently implemented, were for a drastic reduction in the number of end-use tariff items and the establishment of a British preferential rate of 5 p.c. and a most-favoured-nation rate of 10 p.c. on most forms of rolled steel, including bars and rods. However the Board did not recommend the deletion of the then existing end-use item covering wire rod for the manufacture of wire. At that time, wire rod not over 0.375 inch in diameter, when for the manufacture of wire, was dutiable at \$2.25 per ton B.P. and \$5.00 per ton M.F.N. under a tariff item numbered 379(d). The Board recommended that the rates be reduced to Free, B.P. and \$3.00 per ton M.F.N. In its report, the Board made the following comment regarding its recommendation:

"Provision is made for retention of this item in the proposed schedule because of the strong case presented for its retention by independent wire manufacturers. They pointed out at the public hearings that it has been increasingly difficult for them to obtain supplies of wire rod; furthermore, their domestic suppliers of rods (the basic steel producers) are also their competitors in the production of finished wire. Although the steel producers have made substantial tonnages of wire rods available to them, the other wire producers have

(1) A number of changes in these items have been recommended by the Board in its Report, Machinery and Equipment Used in the Mining Industry and in the Oil and Gas Industries, Volume 2: Mining Equipment; Reference 130. Ottawa, Queen's Printer, 1963. (Cat. No. FT4-130/2)

(2) Basic Iron and Steel Products, Tariff Board, Reference 118, Ottawa, Queen's Printer, 1957



not been able to obtain sufficient to meet their needs, and have had to import sizeable tonnages of rods from abroad. If this latter source of supply did not remain open to them, they feared that their operations would be curtailed. In the light of these circumstances, it is felt that, if existing item 379(d) were not continued, considerable injury might result to a number of wire and nail producers in Canada."<sup>(1)</sup>

The present terms of reference of the Board with respect to wire rod are far narrower than those of Reference 118 in which a study of wire rod was part of a much broader study of the basic iron and steel industry. It was clearly not the intention that the Board should make another study of the entire basic iron and steel industry. Its task is, rather, to review, in the light of what may have transpired since 1957, the tariff provisions for wire rod for use in the manufacture of wire.

### The Market

Statistics of the market for wire rod are contained in the table on the following page.

At the time of the Board's inquiry into basic iron and steel products (Reference 118) in 1956, production of wire rods had been expanding rapidly since the end of World War II, and imports had been negligible for twenty-five years. Production of wire declined after 1956, and the level reached in that year was not exceeded until 1964. Imports have been consistently higher since 1956 than in earlier years. There was a steel strike in Canada in 1958 and, as a result, substantial imports were required in 1958 and 1959. After allowing for that abnormal situation, imports have risen steadily from 11,000 tons in 1957 to 76,000 tons in 1963, and an estimated 120,400 tons in 1964. In 1963 the imports were equivalent to 16.5 per cent of supply by volume and in 1964 they were equivalent to about 22 per cent. One of the two Canadian producers of steel wire rod made substantial imports in 1964 in order to meet sales commitments.

A special survey of rod imports during 1963 revealed that about 90 per cent by volume had been entered under tariff item 379c; of the remainder, some exceeded 0.375 inch in diameter and were classified under tariff item 379, and some were entered under tariff item 379d.

The causes of the rise in imports are discussed in a later sub-section, but the principal ones have been an increase in the number of unintegrated wire drawers, favourable prices abroad and, in 1963 and 1964, the inability of Dosco and Stelco to meet the demand.

---

(1) Basic Iron and Steel Products, Tariff Board, Reference 118, Ottawa, Queen's Printer, 1957

THE CANADIAN MARKET FOR WIRE ROD

	<u>1951</u>	<u>1952</u>	<u>1956</u>	<u>1957</u>	<u>1959</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Production	(tons)	318,266	286,471	403,834	291,300	382,106	356,574	386,851	444,831
Canadian Factory Shipments	(tons) (a)	122,514	113,095	403,602	292,563	380,132	354,119	390,851	442,561
	(\$'000) (a)	9,695	10,688	42,565	34,409	46,183	46,362	50,462	..
Imports	(tons)	8,322	10,014	14,220	10,834	30,519	38,464	75,740	120,359(c)
	(\$'000)	1,001	1,002	1,557	1,234	3,049	4,065	7,148	11,243(c)
Exports	(tons) (b)	336	1,145	2,133	2,551	9,102	5,599	6,072	6,981
	(\$'000) (b)	64	148	226	247	1,117	698	791	1,111
Total Canadian Supply	(tons)	326,252	295,340	415,921	299,583	403,523	389,439	456,519	558,209
Imports as Percentage of Supply, by Volume	(tons)	2.6	3.4	3.4	3.6	7.6	9.9	16.6	21.6

(a) Includes some intra-firm shipments  
 (b) Prior to 1960, wire rods of iron and steel  
 (c) Estimated on the basis of nine months data

Source: D.B.S. Catalogue numbers 41-001 and 41-203, and Trade of Canada

IMPORTS OF WIRE RODS1947 - 1963

(tons)

<u>Year</u>	<u>U.K.</u> <u>Tons</u>	<u>Australia</u> <u>Tons</u>	<u>Belgium and</u> <u>Luxembourg</u> <u>Tons</u>	<u>France</u> <u>Tons</u>	<u>Germany</u> <u>Tons</u>	<u>Japan</u> <u>Tons</u>	<u>United States</u> <u>Tons</u>	<u>Other</u> <u>Tons</u>	<u>Total</u> <u>Tons</u>
1947	-	-	-	-	-	-	1,522	-	1,522
1948	-	-	-	-	-	-	869	-	869
1949	-	-	-	-	-	-	7,910	-	7,910
1950	561	-	2,035	100	381	-	437	-	3,513
1951	422	-	2,824	2,133	2,012	-	710	222	8,322
1952	224	-	2,586	-	364	-	2,023	-	5,197
1953	2,106	-	2,876	-	2,566	-	2,294	173	10,014
1954	3,701	-	1,103	-	3,343	-	520	-	8,666
1955	1,668	-	-	-	4,108	-	891	15	6,683
1956	1,808	-	5,181	-	6,341	-	890	-	14,220
1957	967	-	3,801	-	3,924	-	1,894	248	10,834
1958	15,212	-	10,608	-	8,247	-	7,562	2,679	52,883
1959	2,350	-	10,329	8,576	7,906	-	1,155	-	30,519
1960	1,827	-	1,978	8,779	5,159	-	463	268	16,281
1961	1,412	499	9,123	4,755	10,440	1,831	237	384	38,464
1962	5,909	648	20,560	14,170	14,677	2,201	96	58	69,939
1963	6,628	1,951	19,903	25,440	17,294	2,552	145	45	75,740 (e)
1964 (a)	..	..	..	23,025	..	6,750	..	..	120,359 (e)

(a) Estimated on the basis of nine months data

Source: D.B.S. Trade of Canada



In 1963 and 1964 about 80 per cent by volume of rod imports came from countries of the European Coal and Steel Community; and most of the increase in imports of recent years is accounted for by imports from those countries. Imports from Australia, Japan and the United Kingdom have also risen rapidly over the past few years but have remained small compared with those from E.C.S.C. countries. Imports from the United States have not been significant in recent years.

A large proportion of imports from the E.C.S.C. countries have consisted of what is known as Thomas quality wire rod, made from steel produced in Bessemer converters rather than in open hearth furnaces. While some witnesses testified that Thomas steel can be produced in very high quality, most of the Thomas rod imported has been of relatively low quality and has been destined for use in the manufacture of nails, concrete reinforcing mesh and, to a lesser extent fencing.

The Bessemer converter has been used for many years in Europe to utilize ores having a high content of phosphorous, of which there was a plentiful supply near at hand. A by-product of the process is a phosphorous-rich slag which is sold to the fertilizer industry; revenues from the sale of this slag are substantial. For this and other reasons, Thomas steel of relatively low quality has been produced more economically than open hearth steel in Europe, and is sold for less than open hearth steel. The additional costs of bringing Thomas steel to the higher stages of quality are apparently such that most of the higher quality steels are produced by the open hearth method in Europe, or in the more modern oxygen converters, a large number of which have been installed since the war and which appear to be superseding both the Thomas and the open hearth converters. In fact, with changes in sources of iron ore and changes in steel technology, it is not expected that any more Bessemer converters will be installed in Europe. None the less, some 40 per cent of the steel produced in Belgium, Luxembourg, Germany and France is still of Thomas quality. No Thomas steel is produced in North America.

Imports of wire rod from the United Kingdom include substantial tonnages of high quality steel rod used for the manufacture of spring wire, roping wire, wire for welding electrodes and other specialized products. Imports from Australia and Japan, largely into Western Canada, have been a new element in the import situation in recent years. They have consisted of open hearth steel rod of what might be termed ordinary qualities for use in the manufacture of nails and concrete reinforcing mesh. Imports from the United States are believed to consist largely of specialty steels; they had an average value of over \$600 per ton in 1963.

Imports by provinces as well as by countries of origin are shown in the following table.

IMPORTS OF STEEL WIRE RODS BY COUNTRIES OF ORIGIN  
AND PROVINCES OF ENTRY  
(tons)

<u>Country of Origin</u>	<u>Year</u>	<u>Newfoundland</u>	<u>Quebec</u>	<u>Ontario</u>	<u>British Columbia</u>	<u>Total</u>
United Kingdom	1962	-	3,845	2,064	-	5,909
	1963	-	4,528	2,100	-	6,628
Australia	1962	-	-	-	648	648
	1963	-	-	-	1,951	1,951
Belg./Lux.	1962	-	8,644	10,414	1,502	20,560
	1963	372	5,209	8,309	6,013	19,903
France	1962	35	18,745	3,543	3,116	25,440
	1963	-	19,439	550	3,036	23,025
W. Germany	1962	-	11,717	2,226	734	14,677
	1963	-	14,377	2,343	573	17,294
Japan	1962	-	44	17	2,491	2,552
	1963	-	645	22	6,083	6,750
United States	1962	-	2	94	-	96
	1963	-	-	145	-	145
Other	1962	-	-	58	-	58
	1963	-	-	45	-	45
Total	1962	35	42,997	18,415	8,492	69,939
	1963	372	44,197	13,515	17,657	75,740

Source: D.B.S. Trade of Canada

The imports entered through British Columbia in 1963 accounted for by far the greater part of consumption in British Columbia and Alberta. Most of the remaining imports, amounting to 58,000 tons, and all but a few thousand tons of Canadian production, were consumed in Ontario and Quebec.

Exports of wire rod have not generally been very large, and were equivalent to less than two per cent of production in 1963 and 1964. Exports in 1964, which amounted to 6,981 tons, went to twelve different countries; the United States, Great Britain and France were the largest buyers. In 1960 exports amounted to 36,506 tons; the principal buyer was Great Britain, which experienced a shortage of wire rod in that year.



## Factors Contributing to the Rise in Imports

The imports of wire rods have been due principally to three closely related factors. First, a substantial number of unintegrated producers of wire products have installed their own wire drawing equipment in recent years; it is they who have imported most of the rod. Second, in 1963 prices of wire rods in Europe and elsewhere declined to the lowest levels in many years; prices of Canadian wire rods to unintegrated producers, while subject to some selective discounts, did not decline to nearly the same extent. Third, Dosco and Stelco have at times been unable to supply all the requirements of the unintegrated producers. Each of these three factors is discussed below.

The Rise of the Unintegrated Producers - At the public hearing a spokesman for Dosco estimated that in 1962 imports had supplied about three fourths of the rod used by unintegrated producers. This would put total consumption of rod by the unintegrated producers at between 90,000 and 100,000 tons in that year and at a somewhat higher level in 1963 and 1964. In other words, nearly a fourth of total consumption of wire rods is accounted for by the unintegrated producers. This represents a many-fold increase in recent years; a large part of this increase is accounted for by new wire drawers who did not have traditional connections with Dosco or Stelco.

For purposes of comparison the year 1950 can be taken. It was a time when the effects of wartime shortages of steel were still in evidence, the Korean War was beginning to make additional demands on supplies of steel, and when the number of unintegrated users of rod was small. In that year there were only three independent firms in the Wire and Wire Goods Industry which were engaged in the drawing of wire. They were:

United Nail and Foundry Company Limited, St. John's, Nfld.  
B. Greening Wire Company Limited, Hamilton, Ont.  
Morrison Wire and Nail Company Limited, Vancouver, B.C.

There were, in addition, certain other users of wire rods in other industries, including manufacturers of screws, chain and cement pipe. Altogether, however, the total usage of wire rods by unintegrated producers was only a fraction of what it has been in more recent years.

By the time of the public hearing, on the other hand, there were at least 15 unintegrated wire drawers. Of these, the following six were manufacturers of nails with their own wire drawing facilities:

Daw's Nail and Hardware Limited, Bay Roberts, Nfld.  
United Nail and Foundry Company Limited, St. John's, Nfld.  
Sivaco Wire and Nail Company Limited, Marievalle, Que.  
Mercury Wire and Nail Company Limited, St. Hyacinthe, Que.  
Irving Wire Products Limited, Calgary, Alta.  
Morrison Wire and Nail Company Limited, Vancouver, B.C.

Sivaco, which is now the largest of these, employs between one and two hundred people in the production of nails and other wire products. As a group, these firms supply a significant proportion



of the market for nails. Total production of wire nails amounted to 99,000 tons in 1964, about 6 per cent greater than 1951. Although total Canadian production of nails has not increased very much, the independents have obtained a larger share of the market, and their consumption of wire rod has risen considerably.

In terms of tonnage of wire rods used by unintegrated producers, however, the greatest increase may well have been in the manufacture of concrete reinforcing mesh. Shipments of welded or woven wire mesh for concrete reinforcement or purposes other than fencing amounted to about 6,000 tons in 1950 and 21,000 tons in 1957, but it reached 77,000 tons in 1964. Moreover, independents have supplied a sizeable proportion of this quantity - perhaps a third or a half. The following are among those who have entered into the production of mesh from wire rod in recent years:

B.R.C. Weldmesh (1960) Limited, Vancouver, B.C.  
 Irving Wire Products Limited, Calgary, Alta.  
 Lundy Fence Company Limited, Dunnville, Ont.  
 Sivaco Wire and Nail Company Limited, Marieville, Que.  
 General Wire and Cable Company Limited, Cobourg, Ont.

Within very recent years the following three large producers of welding electrodes have installed their own wire drawing equipment:

Air Reduction Canada Limited, Montreal, Que.  
 L'Air Liquide, Montreal, Que.  
 Lincoln Electric Company of Canada Limited, Toronto, Ont.

Total shipments of welding electrodes by all manufacturers amounted to 26,000 tons in 1962.

General Wire and Cable Company Limited, established in Cobourg in 1954, has its own wire drawing facilities together with a galvanizing line; this enables it to draw its own wire for fence, which is made of galvanized wire. Webster and Horsfall (Canada) Limited, set up a wire drawing plant in Three Rivers, Quebec, in 1951, where it produces a line of high quality steel wire for manufacturers of wire rope, springs and other specialized products.

Prices - An important cause of the relatively high level of imports of wire rods in 1962 and 1963 was a decline of steel prices in Europe and in a number of other steel producing regions of the world. The price declines are reflected in the table below and in the graph on page 34. They include the effects of the changes in the value of the Canadian dollar throughout these years.

The figures in the table are, of course, averages, and the average values of Canadian factory shipments must be interpreted with particular caution. Most of the Canadian factory shipments recorded are intra-firm shipments; sales at arm's length by Dosco and Stelco have in fact been somewhat more sensitive to competitive conditions than the table indicates. Moreover, the Canadian figures reflect shipments of rod in a broad range of qualities, whereas most of the imports from Europe were of Thomas quality. Nevertheless, European export prices have tended to be much more volatile than Canadian prices.

In 1962 and 1963, a variety of factors led to a very sharp deterioration of steel prices in Europe, which has been followed by some recovery.

DUTIABLE VALUE/TON OF ROD IMPORTS

<u>Year</u>	<u>United Kingdom</u>	<u>Belgium &amp; Luxembourg</u>	<u>France</u> (dollars per ton)	<u>Germany</u>	<u>Japan</u>	<u>Australia</u>	<u>Average Value Per Ton of Cdn. Factory Shipments of Wire Rod</u>
1938	-	33	-	24	-	-	40
1939	-	31	-	-	-	-	40
1947	-	-	-	-	-	-	49
1948	-	-	-	-	-	-	58
1949	-	-	-	-	-	-	63
1950	72	65	-	72	-	-	71
1951	72	127	108	126	-	-	79
1952	85	130	-	122	-	-	82
1953	89	82	-	79	-	-	95
1954	83	81	-	75	-	-	98
1955	89	-	-	100	-	-	92
1956	98	99	-	107	-	-	105
1957	112	106	-	112	-	-	118
1958	103	96	90	96	-	-	113
1959	111	91	98	98	-	-	121
1960	110	104	112	102	100	-	124
1961	114	99	110	101	100	-	131
1962	117	88	95	94	105	97	130
1963	117	85	91	94	98	91	129
1964 (a)	117	84	88	92	95	90	..

(a) Estimated on the basis of nine months data

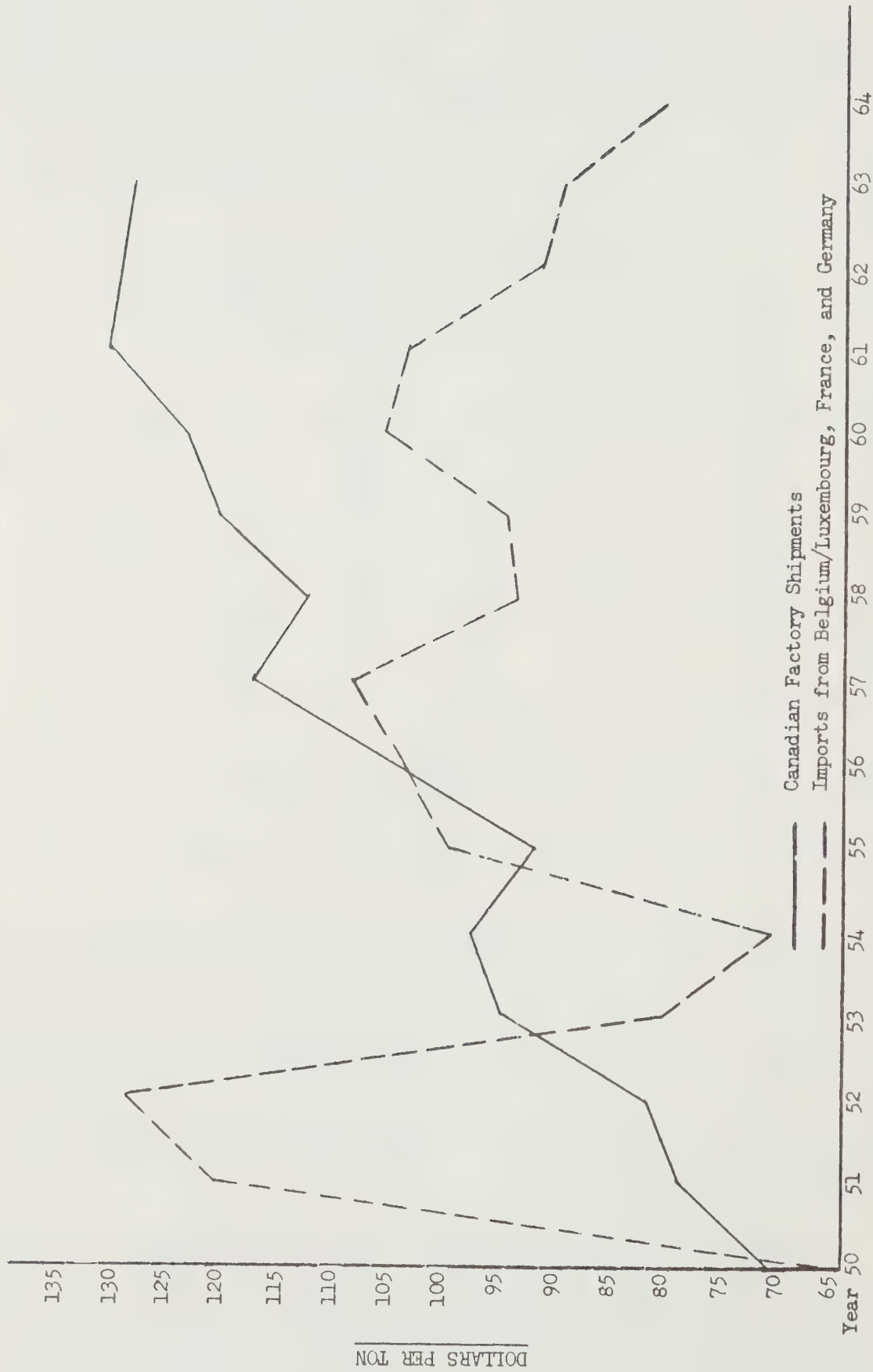
Source: Based on D.B.S. Trade of Canada

A more precise measure of the competition faced by Dosco and Stelco can be obtained by reference to prices of particular qualities of wire rod.

The price in Europe of Thomas quality wire rod in the widely used size of 5.5 millimeters diameter was reported to have reached a low of \$U.S. 75 per metric ton in 1963, or about \$Can. 73.50 per short ton. Prices of other sizes and grades ranged upward from that figure. Open hearth steel wire rods were being sold at \$10 to \$15 per metric ton over Thomas rods.

Freight rates from Europe to Montreal, Halifax and Saint John were reported at the public hearing to have been \$11.11 per short ton in 1963. Including the most-favoured-nation duty of \$3.00 per ton and transportation cost within Canada, the cost of landing European rod in Ontario and Quebec would probably have varied from around \$15 to \$20. The cost of landing European rod at Vancouver would have been of the order of \$25.

Average Unit Values of Wire Rod - Canadian Factory Shipments  
and Imports from Selected Countries, by Years



Source: Based on D.B.S. statistics



Altogether, then, at the lowest prices reached in 1963, European wire rod was probably landing in Quebec Province at prices ranging upwards from \$90 and in Vancouver at prices ranging upwards from \$100. Rod from Australia and Japan was also landing at Vancouver at costs equal to or even less than European rod. For the year as a whole, average prices were, of course, somewhat higher.

European steel prices recovered considerably in 1964. It was reported in September, 1964 that the kind of rod which had reached a low point of \$U.S. 75 was selling at \$U.S. 96. In addition, it was reported that freight rates from Europe had risen by some 15 per cent. Average monthly prices of Thomas quality wire rod were reported as follows, in U.S. dollars per metric ton, f.o.b. Antwerp:

PRICES OF THOMAS QUALITY ROD  
(F.O.B. ANTWERP, U.S. DOLLARS PER METRIC TON)

	<u>1963</u>	<u>1964</u>
January	85.00	81.00
February	89.00	84.50
March	90.00	87.00
April	89.00	90.50
May	88.50	92.00
June	88.00	92.00
July	86.50	92.00
August	81.00	92.50
September	80.50	93.00
October	77.00	93.00
November	77.50	92.50
December	78.50	92.50

Source: American Metal Market, December 30, 1964.

Since Thomas quality steel is not produced in North America, Dosco and Stelco supply open hearth steel rods for such uses as nails and concrete reinforcing mesh, even though the Thomas quality is suitable for these purposes. In the face of increased competition from imports, Dosco and Stelco reacted by offering "import allowances" to customers where such allowances appeared desirable to meet import prices. They did this rather than reduce published prices. One consequence of this is that actual rod prices now charged by Dosco and Stelco to manufacturers of nails, concrete reinforcing mesh and certain other products vary from one customer to another. To some extent they vary according to the customer's ability and propensity to import; but, in some cases the domestic rod producers may decide not to attempt to meet import prices, and no allowance is offered.

A fairly good idea of the prices at which Canadian rods could be purchased was obtained at the public hearing. B.R.C. Weldmesh of Vancouver, a manufacturer of concrete reinforcing mesh and other products, reported it had been quoted a price of \$128 per ton for

Canadian rod landed in Vancouver. After allowing for costs of transport from Hamilton, this would have meant a price f.o.b. Hamilton of about \$106 per ton. The same company reported it had not been offered rods by Dosco. The spokesman for Dosco indicated his company had not sought the orders because it could not offer a price competitive with what B.R.C. Weldmesh was paying for imports. Dosco would have a freight advantage over Stelco in shipping to Vancouver by boat, but the extent of this advantage was not revealed.

The offer of Canadian rod at \$106 per ton f.o.b. plant is as low as any which came to the attention of the Board. While it was clearly not a satisfactory price from the viewpoint of the two Canadian producers, it was a price at which one efficient producer had indicated willingness to sell in an effort to compete with imports.

Taking a price of Canadian rod f.o.b. Hamilton of \$106 per ton and a price f.o.b. a foreign port of \$80 per ton the landed cost at Canadian nail and mesh plants would be approximately as follows:

	<u>Price f.o.b.</u> <u>Seller's plant</u> \$Can.	<u>Cost of Landing</u> <u>at User's Plant</u> \$Can.	<u>Total Cost</u> <u>to User</u> \$Can.
<u>User at Vancouver:</u>			
Canadian rod	106	22.00	128
Foreign rod	80	25-30.00	105-110
<u>User at Calgary:</u>			
Canadian rod	106	27.00	133
Foreign rod	80	40-45.00	120-125
<u>Users in Ontario and Quebec</u>			
Canadian rod	106	5-10.00	111-116
Foreign rod	80	15-20.00	95-100

According to these examples, Canadian rod for mesh would have been \$18 to \$23 per ton higher than imported rod in Vancouver, \$8 to \$13 higher in Calgary and \$11 to \$21 higher in Ontario and Quebec. These calculations are, it should be emphasized, based on a special price quoted to meet import competition.

Speaking of the general level of Canadian rod prices as at the time of the public hearing, a spokesman for Dosco placed the spread between the prices of Canadian producers and the landed cost of imports at about \$30 per ton, but he indicated that the Canadian producers would be capable of narrowing this gap considerably. He said:

"The difference between import prices and Canadian domestic prices is running in the order of \$30 per ton. Now that spread is greater than we can hope to cope with by lowering prices. We would like to think, when all the evidence has been sifted through, there will be an increase in the rate of duty applicable. When that happens, we can reassess the position and see if we can come up with a decrease in price.



On the other hand, if we look at decreasing our prices too much, we might drop our prices 15 or 20 dollars a ton and not compete with the imports, so that in that particular instance we could see a position whereby doing anything to lower prices would be of no advantage. That was somewhat true of nails, prior to the new rates of duty becoming effective".(1)

Taking into account the increases in European prices which have occurred since the public hearing, it would appear that the Canadian producers would be capable of offering competitive prices in all regions with the possible exception of British Columbia, and this takes no account of the premium which open hearth steel enjoys over Thomas quality steel.

The gap in prices between Canadian and imported rods of more specialized qualities appeared to be less than in the case of rods used for nails, mesh and similar products. Webster and Horsfall, a manufacturer of high quality wire, reported that the Canadian prices for rod which had been quoted to them were 22.2 per cent higher than the prices at which they were actually buying rod in the United Kingdom. This compares with over 30 per cent noted in the previous example relating to lower quality rod. In both cases, of course, costs of landing rod at a Canadian plant would reduce these differentials considerably.

Of three independent manufacturers of welding rods, only Air Reduction Canada Limited appeared at the public hearing. Air Reduction was using rod imported from the United Kingdom whereas the others were depending mainly on Canadian rod. While the price of the imported rod was lower, this was not the point which was stressed by the company. The company was importing primarily because it had encountered a technical problem in adapting Canadian rod for use in its particular drawing equipment. This problem is expected to be resolved when the new rod mills of Dosco and Stelco are in full operation.

Availability of Domestic Supplies - The availability of domestic supplies of wire rod to the unintegrated producers is governed entirely by Dosco and Stelco. It depends on the decisions of Dosco and Stelco on how much rod to retain for their own use and how much to sell to unintegrated producers who will use the rod to produce nails, mesh and other finished products in competition with Dosco and Stelco.

For many years the availability of domestically produced wire rod appears to have been a matter of concern to the unintegrated producers. During and after World War II and during the Korean hostilities there were, of course, shortages of wire rod along with shortages of other forms of steel. Indeed, judging from submissions which were made at the public hearing respecting Basic Iron and Steel Products in 1956, it would appear that there had been an insufficient supply of domestically produced wire rod available to independent users from the time of the World War II shortages right up to the time of that hearing.

---

(1) Transcript, November 5, 1963, pages 302-303



At that hearing, Morrison Steel and Wire Company Limited of Vancouver reported that, while they were buying all the Canadian wire rod they could obtain, they had to import some rod in order to fill all their requirements. Sivaco Wire and Nail Company reported that over the six preceding years they had had to import a major proportion of their requirements because the two Canadian rod producers had indicated that they could not supply all Sivaco's requirements. United Nail and Foundry Company Limited reported that from 1939 until 1954 it had been receiving Canadian rod on the basis of allocation and that its operations had often been hampered by lack of material; the company reported it had not been able to buy any rod at all from Stelco. There were other companies as well which reported difficulties in obtaining adequate supplies of Canadian rod.

In 1958 there was a lengthy steel strike in Hamilton, and very large tonnages of wire rod had to be imported. According to information received from the steel producers, however, there was surplus rod capacity in each of the years 1959 to 1962 inclusive, and in some earlier years as well.

With regard to the year 1963, Stelco reported that it had no surplus capacity to produce wire rods. Dosco reported that it had substantial surplus capacity in 1963. After investigation, the Board has concluded that, while Dosco did have surplus capacity in 1963, the surplus was confined largely to certain sizes of rod, and the company could only have replaced a small part of the 76,000 tons of wire rod imported in that year.

According to information received by the Board subsequent to the public hearing, domestically produced wire rod has been in even shorter supply during 1964 than it was in 1963, despite a considerable increase in Canadian production and imports.

Dosco's new mill is scheduled to begin production in 1965. To what extent this will improve the overall balance between supply and demand will depend upon total demand and the extent to which the increased domestic production is made available to the unintegrated producers.

Despite the shortages of domestic supply, only a few of the unintegrated producers made references to difficulties of obtaining supplies from Dosco and Stelco; there was a much greater tendency on the part of the unintegrated producers to complain that they could not afford to buy Canadian rods at the prices asked by Dosco and Stelco. There were however some complaints of inability or difficulty in obtaining domestic supplies. Lundy Fence Company Limited, a manufacturer of welded mesh and other products reported that in 1959, when they were considering the installation of wire drawing facilities, they were told by the two rod producers that there were no wire rods available for new customers.

With regard to making supplies available to the independents, the spokesman for Stelco stated:

"We have followed this policy and shall continue to the best of our ability to follow the same policy, of providing tonnages

to our customers through thick and thin, commensurate with the support they have afforded us".(1)

The spokesman for Webster and Horsfall, however, expressed grave reservations about these assurances regarding supply. He stated:

"In 1951 my employer visited Canada in connection with the establishment of a mill at Three Rivers and called on the Steel Company of Canada to ascertain whether that company would be prepared to assure us that they would make rods available to us on a regular basis. The responsible official of Stelco made it quite clear that at that time we could not count upon it.

"...we have been unable to support Stelco for the simple requirements of economic survival and in pursuit of profits. Because of our failure to support them we assume, in the light of the statement just quoted, we could not count on supplies through thick and thin in the future."(2)

The Board heard very few complaints of the range of qualities and sizes available from the two Canadian producers. Many independent users expressed satisfaction with these aspects of Canadian supply. At the same time, the spokesman for Dosco mentioned that after their new rod mill was completed they would be capable of producing rod in the larger coil sizes which are now in increasing demand, and that the contour of the rod would be improved. He stated:

"The reasons for the investment are these: First of all to come to a better quality and better cross-section ... and ... to improve efficiency and try to stay even with the improving efficiency of off-shore suppliers."(3)

Dosco's existing rod mill was built some sixty years ago.

There were exports of around 6,000 tons in 1963 and 1964, largely to Great Britain, western Europe and the United States.

Margins Available to Rod Processors - There was a considerable amount of discussion at the public hearing about the implications for the unintegrated producers of the fact that the two Canadian suppliers of wire rod are themselves manufacturers of products made from wire rod. A number of unintegrated producers asserted that they had been, were being, or were afraid they would be, subjected to a "price squeeze" by the two integrated producers. As one example of comments made at the public hearing, a spokesman for Lundy Fence stated:

"...our problem, as we see it, is not the standard problem of a Canadian manufacturer appearing before the Board to ask for protection against imports of the finished product...Our problem is what has been referred to by others in the very brief word 'squeeze'. We compete in Canada against the two integrated steel companies. This has been mentioned so often in the course

(1) Transcript, November 4, 1963, p. 33

(2) Same, November 7, p. 694

(3) Same, November 4, 1963, p. 142



of the hearings that reference to it again must sound like a broken record, but this is the essence of our submission. We compete with companies which are the suppliers of the raw materials and which are themselves the producers of the finished products."(1)

The issue is of considerable importance because the cost of rod is in many cases the principal cost in the manufacture of the end product. For example, whereas ordinary grades of rod are priced in the range between \$100 and \$125 per ton, the average selling price of nails is around \$200 per ton, and a popular size of concrete reinforcing mesh is sold in Ontario at \$166.66 per ton. Clearly, the cost of the rods is of vital importance to the rod processor, whether he be integrated or not.

There was fairly general agreement at the public hearing that over the past few years there had been some narrowing of the margin between the prices of Canadian wire rod and the Canadian prices of a number of products made from wire rod.

The market for nails, for example, has become a highly competitive one, and since 1957 prices have declined in many parts of the country. The largest decline was reported at Calgary, where prices had dropped by 18 per cent, and there were lesser declines in other centres, although prices had remained more or less unchanged at Toronto. In contrast, the largest unintegrated producer of nails, Sivaco, reported that they were being offered Canadian rod at only two per cent less than in 1957.

Over the same period, the price of a popular size of concrete reinforcing mesh declined by ten or twelve per cent without a proportionate decline in prices of Canadian rod for use in making mesh. The margin between the prices of welding rod and the prices of Canadian rod for use in making welding rod also appeared to have narrowed.

There was much less agreement at the public hearing about the significance of these declines in margins. Some of the unintegrated producers were highly critical of Dosco and Stelco for not keeping the prices of wire rod in line with the reduced prices of wire products, and it was in this context that references to "price squeeze" were often made. On the other hand, spokesmen for Dosco and Stelco ascribed the reduced prices of finished products to competition from unintegrated producers using wire rod imported at very favourable prices and to low priced imports of finished wire products. Spokesmen for both companies made very strong statements to the effect that they had never followed deliberate policies of "squeezing" their customers.

From the foregoing and from confidential information in the hands of the Board, the following rather limited conclusions would seem to be justified:

1. While there was a decline in margins between 1957 and the time of the public hearing, this does not necessarily mean that the margins in 1957 were the right ones and that those in 1963 were not. In fact, many of the unintegrated producers operated very successfully in 1963 by obtaining raw materials

---

(1) Transcript, November 6, 1963, p. 513



from the cheapest sources, namely from abroad, thus maintaining and even increasing their margins. However had these producers been entirely dependent on Canadian rod their operations would have been much less profitable and some of them would have been in extremely difficult positions. In any case, even if Dosco and Stelco had further reduced their prices in 1963 they would not have been able to supply the demand. The declines in prices of finished products probably reflected both internal competition among integrated and unintegrated producers, and lower costs of imported finished products.

2. Technically, whenever the cost of importing rods is prohibitive, Dosco and Stelco are in a position to apply a "price squeeze" to unintegrated processors of rod. However, most of the unintegrated producers are relative newcomers, and Dosco and Stelco have never supplied a large proportion of their rod requirements. As noted earlier, the unintegrated producers have been importing about three-fourths of their requirements.

### Proposals

Both Stelco and Dosco proposed the deletion of the following tariff items:

	<u>B.P.</u>	<u>M.F.N.</u>
379c Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, when imported by manufacturers of wire for use in the manufacture of wire, in their own factories.....per ton	Free	\$3.00
379d Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, when imported by manufacturers of wire fencing for use in the manufacture of wire for wire fencing.....per ton	Free	Free

The wire rods now classified under those tariff items would then become dutiable along with other steel rods under tariff item 379 which is as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
379 Bars or rods of iron or steel, hot-rolled, plain or deformed, namely: rounds, half-rounds, ovals, half-ovals, squares, round-cornered squares, hexagons, octagons or other multisided bars or rods; flats, 13/64 inch or more in thickness and eight inches or less in width	5 p.c.	10 p.c.

The principal effect of the proposal would be to raise the duties on most of the rod used for manufacturing wire from Free, B.P. to 5 p.c., B.P. and from \$3.00 per ton, M.F.N. to 10 p.c., M.F.N. The existing most-favoured-nation duty of \$3.00 per ton under tariff item 379c is equivalent to about 3 p.c. ad valorem at present prices.

A large number of unintegrated producers objected strenuously to the proposed increases in duties on wire rod now entered under tariff item 379c. The following firms proposed that there be no changes in the rates of duty under that item and that the item be broadened by the removal of the size limitation:

Sivaco Wire and Nail Company Limited  
 Lundy Fence Company Limited  
 Mercury Wire and Nail Company Limited  
 P.L. Robertson Company Limited  
 Air Reduction Canada Limited  
 Webster and Horsfall (Canada) Limited  
 Canadian Importers Association Incorporated  
 Canadian Electrical Manufacturers Association  
 British Rod Rollers' Association  
 Europam Corporation Limited

The following firms expressed opposition to increases in the rates of duty under 379c, and some proposed that the existing rates might be reduced:

Irving Wire Products Limited  
 B.R.C. Weldmesh (1960) Limited  
 Morrison Steel and Wire Company Limited  
 Titan Steel and Wire Company Limited  
 Wirth Limited  
 Council of the Forest Industries of British Columbia

The spokesman for Lundy Fence suggested, in addition, that no purpose seemed to be served by the words "in the coil" as it now appears in tariff item 379c. Air Reduction Canada Limited indicated a preference for a separate item to cover wire rods used in the manufacture of welding electrodes, welding rods and welding wires, with the same rates of duty as under existing tariff item 379c.

Atlas Steels Company sought to have stainless steel rod excluded from the provisions of tariff item 379c. The company proposed that this be done by adding the words "not including rods of stainless steel" to the item. This would result in stainless steel rods being classified under tariff item 379 at 5 p.c., B.P. and 10 p.c., M.F.N. While expressing confidence that this wording would accomplish the desired purpose, the company said that, as an alternative, rods containing less than one per cent carbon and more than 11.5 per cent chromium could be specifically excluded.

With regard to tariff item 379d, the principal known beneficiary, General Wire and Cable Company Limited, made no appearance at the public hearing and made no proposals, although it did make representations for the continuation of the item to the Board which it regarded as confidential. The Council of the Forest Industries of British Columbia proposed that the item be left unchanged.



P.L. Robertson Manufacturing Company Limited proposed that the item be deleted although, as far as could be ascertained, the company had not direct interest in it. The Canadian Importers Association proposed that the rates under tariff item 379d be left unchanged and that the size limitations be deleted from the item. The British Wire Rod Rollers' Association proposed that the size restriction in the item be removed.

### Representations

Dosco and Stelco presented separate briefs but their interests with respect to duties on wire rod were the same. The following were among the representations made by one or the other of the two companies in support of increased duties on rod:

1. The existing rates discriminate against rod manufacturers, and the number of Canadians employed in the manufacture of wire rods is substantial.
2. The excess of rod capacity in Europe, which is expected to persist for many years, will create continuing pressure of imports into Canada at prices against which the Canadian producers cannot compete.
3. An increase in the tariff to the level obtaining under tariff item 379 is reasonable. It is the rate applied to most similar products. It is reasonable in comparison with the rates in other countries, and it is reasonable in the light of the differences between Canadian and overseas costs of labour.
4. The prevailing low or free rates on wire rod give the importer of rods an unfair advantage over manufacturers who produce products from imported wire, much of which is dutiable under tariff item 401g at 15 p.c. under both the B.P. and the M.F.N. Tariffs.

The spokesman for Dosco defended his company's proposals and contended that the unintegrated producers would not suffer from their implementation. With regard to the unintegrated nail manufacturers, he noted that their economic position had improved considerably since the time of Reference 127 in 1960. While nail prices had declined somewhat, the duties on nails had been increased, and the cost of wire rod from Europe had decreased by something like 15 dollars per ton. Also, due to a decline in imports, nail volume, with consequent lowering of costs, had increased.

He said that the unintegrated producers of welded mesh had also benefited from a similar drop in their raw material costs. In addition, he pointed out that producers in western Canada, who have low cost foreign rod available, have been pricing their products on the basis of eastern prices plus full freight costs to the west, giving them a very wide margin for profit.



He contended that in the light of these benefits, the \$6.00 per ton or so increase in rod costs which would result from the proposals of the steel companies would be relatively moderate.

He then turned his attention to the contention of the unintegrated producers that while foreign rod prices were low at the time of the public hearing, they might well rise, leaving the independents at a disadvantage. In this connection he referred to the European expansion in rod capacity. He contended that this expansion was assurance that there would be no shortage of supply in the foreseeable future. He said:

"...we expect a continuation of severe international competition and a long-drawn-out continuation of inordinately low price."(1)

With regard to wire products, he referred to the possibility of competition driving prices down to the point where the unintegrated producer could not operate profitably. In this connection, he contended that if the duties on wire products proposed by Dosco were implemented there would be little likelihood of off-shore sources being in a position to force drastic price reductions on Canadian producers.

Spokesmen for many of the unintegrated producers, on the other hand, stressed the dual role of Dosco and Stelco as suppliers of rod and as manufacturers of products from rod.

The western fabricators of rod contended that the duties proposed would merely add to the costs of the western fabricators and would not divert business to the eastern steel producers. A spokesman for B.R.C. Weldmesh (1960) of Vancouver contended that a duty of about 30 p.c. on rod would be required to make Canadian rod competitive on the West Coast. He said that the company was supplying the major portion of the West Coast market for concrete reinforcing mesh and that prior to 1957 when his company's predecessor had become established, concrete reinforcing mesh from the United States had supplied that market. Morrison Steel and Wire Company Limited of Vancouver said that to make Canadian rod competitive with imports would require a duty which would more than wipe out the increase in nail duties which was introduced in 1958. Irving Wire Products Limited of Calgary said that duties more than twice as high as those proposed by the steel companies would be required to make Canadian rod competitive at Calgary.

Independent producers of mesh and nails in Ontario and Quebec voiced apprehension that increases in duties on rods would seriously affect their competitive position.

The spokesman for Lundy Fence stated:

"Domestic rod must be available at a price which will afford us an operating margin...we feel that our position as a producer of welded mesh will be untenable if we are completely dependent for our raw material on companies which compete with us in the manufacture and sale of our end product."(2)

(1) Transcript, November 14, 1963 p. 1402

(2) Same, November 6, 1963, p. 507, 508

A spokesman for Sivaco Wire and Nail Company Limited, a large independent manufacturer of nails stated:

"...we would respectfully submit that the Tariff Board in their recommendations should dismiss any attempt that we be forced to buy from our competitors under captive market concept and at the same time have to compete with them in the same products which they and we are manufacturing."(1)

Mercury Wire and Nail Company Limited of St. Hyacinthe, Quebec, sent a written submission opposing any increased rates on rod.

United Nail and Foundry Company Limited, St. John's, Newfoundland, a manufacturer of annealed wire, wire nails and other products, expressed opposition to the proposed increase in duties on wire rod. A spokesman for the company who attended the public hearing said that up until 1962 his company and another smaller manufacturer of nails in Newfoundland had supplied pretty well all the market in that Province. He said his prices had never been changed since 1955. Then, in 1962, the integrated steel mills had lowered their prices of nails in Newfoundland, and some mainland or imported nails had apparently been sold in the Province. He complained that there had been no reduction in the price of Canadian wire rod, and that his company was dependent upon obtaining rod from abroad at the lowest world prices.

P.L. Robertson Manufacturing Company Limited of Milton, Ontario, manufacturers of screws and other products made from rod, stated in a written submission:

"We submit that an increase in the duty on tariff items 379c and 379d would give the basic producers an advantage over other producers of wire products and reduce the competitive position of their customers."(2)

Air Reduction opposed any increases in duties on wire rod which it imports, mainly from Great Britain, for the manufacture of welding electrodes. While the company said it had not met with import competition in the sale of its final products, domestic competition was felt and prices had been reduced in recent years. In these circumstances, they did not wish to see any increase in their cost of rod. The spokesman for the company referred to Stelco as a competitor in the manufacture of welding electrodes in the following terms:

"Most especially do we feel that nothing should be done to increase the price of rod to us when, as is the case, a major steel supplier who is one of the two domestic sources of wire rod suitable for our purposes is also one of our most active competitors in the finished product. We have already stated that the production of welding electrodes is the most important single aspect of our business; to a great steel producer it can only represent a relatively minor endeavour. We feel that the

(1) Transcript, November 5, 1963, p. 360

(2) Same, November 6, 1963, p. 437



best interests of the welding industry and therefore industry as a whole would not be served if, through an increase in Tariff, a major competitor were given undue advantages by virtue of its control over the raw material source."<sup>(1)</sup>

Webster and Horsfall (Canada) Limited opposed the imposition of British preferential duties on wire rods. The company which manufactures fine grades of wire at Three Rivers, Quebec, contended that the duties proposed by the steel companies would be insufficient to make Canadian suppliers' prices of the kinds of rod they buy competitive with imports, and they expressed doubts about assured supplies from the two Canadian rod producers.

Atlas Steels, although not represented at the public hearing, subsequently submitted a brief, copies of which were sent to other known interested parties. The following are some of the points brought forward in the brief:

- The most-favoured-nation duty of \$3.00 per ton under tariff item 379c, when applied to stainless steel rods priced at from \$800 to \$1,600 per ton, amounts to virtually free entry.
- While the company does produce stainless steel wire over 0.58 inch in diameter, it does not produce the smaller sizes which account for most of the market. Thus, the company is not to any significant extent in competition with its own customers. It would, moreover, be glad to see its customers take over production of the larger diameter stainless steel wires as well.
- The company sells stainless steel rods at prices lower than those prevailing in the United States. It has, however, lost a part of the Canadian market to imports from Europe. With the protection of a most-favoured-nation duty of ten p.c., as provided under tariff item 379, the company stated its belief that it could regain some of the market it had lost.

---

<sup>(1)</sup> Transcript, Nov. 7, 1963.p. 594



## Steel Wire

The essential step in the production of wire consists of drawing wire rod through a hole in a tungsten carbide or diamond die, the hole being slightly smaller in diameter than the rod. In practice, a wire drawing machine is equipped with a number of successively smaller dies through which the metal is drawn in one operation.

Plants for the production of a wide variety of wires, such as those operated by Dosco and Stelco, call for a great deal of machinery and equipment in addition to wire drawing machines. Wire rod, as it comes from the rolling mill, is coated with a scale of iron oxide which must be removed before the drawing process is begun. The cleaning process is usually accomplished by dipping the coils of rod in a series of chemical baths. The drawing process induces brittleness in the wire; this must be removed by placing the wire in an annealing oven for a number of hours. The production of the smaller sizes of wire often involves drawing in a succession of separate wire drawing machines and annealing after each draw. High carbon wire, used in the manufacture of wire rope and wire springs, requires a treatment known as patenting rather than annealing. Patenting equipment is costly and requires a considerable amount of space; it consists principally of long ovens through which wire is run, and vats containing molten lead or other cooling media.

Wire is produced in a variety of coatings. The installation of a dip galvanizing line suitable for the economical production of a broad range of high quality wires involves an investment of several millions of dollars. There is equipment for the electrolytic coating of wire with zinc, copper and other materials. Separate facilities are required for the dip coating of wire with tin, with copper compounds and with other substances as well.

While a well equipped wire plant capable of producing a broad range of products represents a heavy investment, it is possible to produce some kinds of wire with little more than one wire drawing machine. For example, the investment required to produce wire for concrete reinforcing mesh is not large; it may be sufficient to remove the scale on the rod by simple mechanical means, thus avoiding the necessity of complex chemical baths; rod which has already been annealed can be purchased and, providing it is not to be drawn down too far, no annealing equipment is required; nor are any coating facilities required.

The value added in converting rod to wire varies widely according to the type of wire. At the time of the public hearing, when rods of ordinary quality were being sold in Canada at between \$100 and \$130 per ton, 11 gauge bright, uncoated wire was being sold at \$155 per ton, or at \$189 per ton if annealed and galvanized. Most high carbon wire for wire rope was selling at between \$250 and \$400 per ton, and there were special varieties of wire being sold at over \$400 per ton.

There are literally thousands of uses to which wire is put. The following table indicates the amounts of wire used in some of the more important applications in 1964:

	<u>1964</u> (tons)
Fencing including barbed wire.....	32,674
Welded or woven wire mesh for concrete reinforcement or other purposes except fencing	77,202
Wire rope and strand	46,654
Nails and staples	99,759
All other uses (estimated)	246,260
	<hr/>
Total	<u>502,549</u>

Source: D.B.S. Catalogue Number 41-006

The following are a few of the other uses which are important in terms of tonnage:

Fasteners such as screws, bolts and rivets  
 Welding electrodes  
 Upholstery springs and other wire springs  
 Core wire, used to reinforce aluminum power cables  
 Wire for reinforcing rubber tires, hose and other goods  
 Bale ties

Nearly all iron and steel wire comes within the scope of this study. No precise measure of the total value of supply is available. However, the amount produced in 1964 would, if it had all been sold on the open market, probably have had a value of around \$90 million; imports in the same year were valued at \$13 million.

Dosco and Stelco together account for something of the order of three fourths of the total tonnage of wire produced in Canada, and a much higher proportion of the tonnage produced for sale. Stelco's wire drawing is done in Hamilton; Dosco has wire drawing plants in Sydney, Montreal and Toronto.

There are, in addition, a considerable number of unintegrated wire drawers, most of whom have only entered the field in the past few years. The table on the following page contains a list of wire manufacturers whose names were brought to the attention of the Board. Of the 100,000 or so tons of wire accounted for by these firms, approximately four-fifths were produced in Ontario and Quebec, and most of the remainder by two firms in British Columbia and one in Alberta. There is also one wire drawer in Newfoundland. Most of the unintegrated producers draw wire principally for their own use, although a few specialize in the production of particular kinds of wire for sale.

MANUFACTURERS OF STEEL WIRE

Plant Location	Round		Galva- nized	Other Coated	Other than Round	Related End Products
	Uncoated	Coated				
Steel Company of Canada Ltd.	Hamilton, Ont.	x	x	x	x	Wire, fencing, mesh, nails, other fasteners, welding electrodes
Dominion Steel and Coal Corp. Ltd.	Sydney, N.S.	x	x			Wire, nails, and other fasteners
	Montreal, P.Q.	x	x	x	x	Wire, fencing, nails
	Etobicoke, Ont.	x	x	x	x	Wire, fencing, mesh, nails and other fasteners
United Nail and Foundry Co. Ltd.	St. John's, Nfld.	x				Nails
L'Air Liquide	Montreal, P.Q.	x				Welding electrodes
Air Reduction Canada Ltd.	Montreal, P.Q.	x				Welding electrodes
Mercury Wire & Nail Co. Ltd.	St. Hyacinthe, P.Q.	x				Nails
Sivaco Wire and Nail Company	Marieville, P.Q.	x				Mesh, nails
Webster and Horsfall (Canada) Ltd.	Three Rivers, P.Q.	x				High carbon wire
Atlas Steels Company Ltd.	Welland, Ont.	x				Stainless steel wire
B.R.C. Weldmesh (1960) Ltd.	Vancouver, B.C.	x				Wire, mesh
Central Electric Wire Ltd.	Perth, Ont.	x				Fine wires
General Wire and Cable Co. Ltd.	Cobourg, Ont.	x	x			Fencing, mesh
The B.G. Greening Industries Ltd.	Hamilton, Ont.	x	x			Fine wires, poultry netting, wire cloth
Lincoln Electric Co. of Canada Ltd.	Leaside, Ont.	x				Welding electrodes
Lundy Steel Products Ltd.	Dunnville, Ont.	x				Mesh(a)
York Steel Construction, Ltd.	Toronto, Ont.	x				Mesh
Irving Wire Products Ltd.	Calgary, Alta.	x				Wire, mesh, nails
Morrison Steel & Wire Co. Ltd.	Vancouver, B.C.	x				Wire, nails, staples

(a) The company also makes fencing from galvanized wire which it purchases



## The Market

Statistics pertaining to the Canadian market for steel wire are presented in the tables on the three following pages. It will be noted that the predominant type is round uncoated, which enters into a great host of other products; the total annual Canadian supply of wire averaged 418,000 tons in the years 1961 to 1964 inclusive. Of this average annual total, about 80,000 tons was galvanized or otherwise coated and was used in the manufacture of fencing and in many other ways. Of the total supply of wire, 84,000 tons were used in the manufacture of nails, tacks and staples; 59,000 tons in wire mesh; 38,000 tons in rope and strand; 31,000 tons in fencing and the remaining 206,000 tons in a large number of other products.

Imports of wire in 1964 amounted to 48,000 tons, equivalent to 9.6 per cent of the market. While the tonnage of imports has been increasing moderately, Canadian production has been rising faster and there has been some decline in the proportion of the market supplied by imports.

Most of the imports have been entered under eight of the 17 tariff items encompassing steel wire which are in the Reference.

### IMPORTS OF STEEL WIRE, BY PRINCIPAL TARIFF ITEMS

Tariff		Duty Rates		Imports, 1963
<u>Item</u>	<u>Summary Description</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>(tons)</u>
<u>Mainly Round, Uncoated:</u>				
403(c)	Roping wire and core wire	Free	5 p.c.	21,315 <sup>(a)</sup>
403(a)(i)	Spring wire for	Free	5 p.c.)	1,356
(ii)	Mattresses, etc.	5 p.c.	5 p.c.)	
401(g)	Wire, n.o.p.	15 p.c.	15 p.c.	7,000 <sup>(b)</sup>
<u>Round Coated:</u>				
401(d)	Galvanized wire of specified sizes	Free	10 p.c.	925 <sup>(b)</sup>
401(e)	Galvanized wire, n.o.p.	10 p.c.	20 p.c.	3,977 <sup>(b)</sup>
402d	Galvanized wire for fencing	Free	Free	4,240 <sup>(b)</sup>
401(f)	Round, with other coatings	15 p.c.	25 p.c.	898
<u>Other:</u>				
401(c)	Flat wire	7½ p.c.	20 p.c.	367 <sup>(b)</sup>
Other Tariff Items				482
				<u>40,559</u>

(a) Includes several thousands of tons of core wire, which is galvanized

(b) Estimated

Source: Trade of Canada, except where otherwise stated

IMPORTS OF STEEL WIRE, BY TARIFF ITEMS AND SELECTED YEARS

<u>Description</u>	<u>Tariff Item</u>	<u>1951</u>		<u>1956</u>		<u>1963</u>		<u>1964 (a)</u>	
		<u>Tons</u>	<u>\$'000</u>	<u>tons</u>	<u>\$'000</u>	<u>tons</u>	<u>\$'000</u>	<u>tons</u>	<u>\$'000</u>
<u>Round, Uncoated</u>									
Wire, steel for wire rope	403(c)	20,794	4,759	24,292	5,875	21,315	5,397	20,994	5,374
Wire, iron or steel, not coated, n.o.p.	401(g), 402h, 403(d), 403h, 409e(3), 438q, 596a	12,655	3,049	13,563	3,337	7,390	2,604	14,751	4,200
Wire, steel, spring, for mattresses, cushions or upholstery	403(a)	5,508	889	2,813	528	1,356	250	1,639	274
<u>Round, Galvanized</u>									
Wire, steel, galvanized, n.o.p.	401(d) 401(e)	1,442	379)	2,545	633(b)	9,141	1,667	8,963	1,629
Wire, galvanized, for fencing	402e, 402f		)						
	402c, 402d	176	29)						
<u>Round, Other Coated</u>									
Wire, iron or steel, coated, n.o.p., except insulated	401(f), 403(e) 403(h)	548	230	575	381	898	574	1,166	656
<u>Other than Round</u>									
Wire, steel, flat or shaped	401(c)	625	230	404	144	459	387	784	646
Wire for corset clasps, etc.	403(b)	148	101	161	143				
Wire, steel, for the manufacture of machine card clothing	403(e)	17	13	10	11(c)				
		41,913	9,679	44,363	11,052	40,559	10,879	48,297	12,779

(a) Estimated on the basis of nine months data

(b) Tariff item 402e is excluded after 1956

(c) Included in s.c. 5214 after 1958

Source: D.B.S. Trade of Canada

PRODUCTION, SHIPMENTS, IMPORTS AND EXPORTS OF STEEL WIRE  
(tons)

<u>Round Uncoated:</u>	Made	1952	1954	1956	1958	1961	1962	1963	1964
	Shipped	279,920	256,254	349,667	301,211	318,322	357,253	384,640	458,764
	Imported (b)	85,944	73,379	108,860	97,341	114,854	129,523	137,613	157,325
		42,132	17,888	40,668	28,153	27,137	32,240	30,061	37,384 (a)
<u>Round, Galvanized:</u>	Made	7,137	60,565	72,244	56,115	56,933	64,618	68,987	76,369
	Shipped	31,499	28,911	38,129	28,177	29,699	33,530	35,826	42,123
	Imported (b)	1,927	2,300	2,545	4,804	7,744	7,264	9,141	8,963 (a)
<u>Round, Other Coated:</u>	Made (c)	2,104	1,779	2,639	1,749	4,749	5,343	5,872	6,857
	Shipped (c)	1,812	1,464	2,165	1,842	4,053	4,437	4,707	5,216
	Imported	580	355	575	754	690	666	898	1,166 (a)
<u>Other Than Round:</u>	Made	2,920	2,345	2,090	3,088	3,949	4,552	4,838	5,106
	Shipped	1,368	1,334	1,190	1,505	2,617	2,905	3,292	3,371
	Imported	216	330	575	329	574	506	459	784 (a)
<u>Total:</u>	Made (d)	279,920	256,254	349,667	301,211	318,322	357,253	384,640	458,764
	Shipped	120,623	105,088	150,344	128,865	151,223	170,395	181,438	208,035
	Imported	44,855	20,875	44,363	34,040	36,145	40,676	40,559	48,297
	Exported	..	..	..	..	2,502	3,925	4,468	4,512
	Apparent								
	Consumption	..	..	..	..	351,965	394,003	420,731	502,549
	Imports as % of								
	Consumption	..	..	..	..	10.3	10.3	9.6	9.6

(a) Estimated on the basis of nine months data

(b) Core wire, most of which is galvanized, is included with imports of round uncoated wire. Imports are believed to have exceeded 4,000 tons in some years

(c) Production and shipments of round, other coated wire are known to be understated by a considerable margin because certain types of coated wire are included under more general statistical headings

(d) Total production is assumed to be equivalent to production of round, uncoated wire because other types are made from round uncoated wire

Source: D.B.S. Catalogue Number 41-006 and Trade of Canada



IMPORTS OF STEEL WIRE, BY COUNTRIES OF ORIGIN, 1963  
(tons)

Description	Tariff Item	Sta- tistical Class	United Kingdom	Austria	Luxembourg Belgium	West Germany	Japan	United States	Other	Total
Round, Uncoated Wire, steel, for wire rope	403(c)	5901 tons \$/ton	13,906 258	- -	125 161	3,708 280	3,524 198	30 1,483	22 272	21,315 253
Wire, iron or steel, not coated, n.o.p.	401(g), 402h, 403(d) 403(h), 409e(3), 438q, 596a, 403(e)	5905 tons \$/ton	1,389 369	722 123	1,036 153	177 200	1,222 144	1,810 784	1,034 208	7,390 352
Wire, steel, spring, for mattresses, cushions and upholstery	403(a)	5903 tons \$/ton	- -	- -	- -	- -	1,245 180	111 228	- -	1,356 184
Round, Galvanized Wire, steel, galvanized, n.o.p.	401(d), 401(e), 402c, 402d, 402f	5907 tons \$/ton	2,009 201	235 125	2,663 141	1,816 154	1,550 160	430 632	440 137	9,141 182
Round, Other Coated Wire, iron or steel, coated n.o.p. except insulated	401f, 403(e) 403(h)	5909 tons \$/ton	140 559	- -	34 567	15 360	29 622	681 665	- -	898 639
Other than Round Wire, steel, flat or shaped	401(c), 403(b)	5902 tons \$/ton	66 537	- -	44 377	- -	- -	344 961	6 715	459 843
Total		17,510 264	957 124	3,902 151	5,716 237	7,570 180	3,406 747	1,402 203	40,559 268	

Source: D.B.S. Trade of Canada

A large proportion of total imports are entered under end-use tariff items, particularly tariff items 403(c) and 402d, with duty-free or low rates of duty. In 1963 over half the total volume of imports consisted of roping wire and core wire entered under tariff item 403(c); in the case of roping wire, the imports supplied well over half the market. Imports of galvanized wire other than core wire, partly under end-use items, have risen rapidly in recent years and accounted for about ten per cent of supply in 1963.

As noted above, imports have not had a large share of the Canadian market over these years. While the share of the market taken by imports varies for different types of wire, imports in 1963 were not more than about 15 per cent as large as production for any of the principal types shown in the accompanying table. In total tonnage imports of the largest category of wire - round uncoated - were greatest, though the tonnage had not increased through the years. As a per cent of the total market, imports of coated wires had made a somewhat greater penetration and had shown a much more substantial upward trend in recent years. This reflects, in part, the further penetration of Thomas quality wire, here in galvanized form. About half of the galvanized wire has been imported into the West Coast where it is able to compete even when dutiable; the other half is imported principally into Ontario and Quebec, largely under the duty-free tariff provisions.

Over the past ten or twelve years the Canadian wire producers have expanded both their capacity to make wire and their range of types of wire to meet the great variety of uses and, while some imports undoubtedly consist of types not available in Canada, this would only be true of a small proportion of total imports. The range of wire produced in the West is, of course, small, so that the greater part of the supply to that part of the country must either be brought from the East or imported. Imports into the West are proportionately larger than imports into the East.

Of the 40,000 tons of imported wire in 1963, more than 17,000 tons, or 40 per cent, came from the United Kingdom, about 11 thousand tons (25 per cent) came from Western Europe, over 7,000 tons from Japan and about 3,400 tons from the United States. By far the greater part of imports from Great Britain consisted of roping wire, although substantial tonnages of high quality galvanized wire were also imported from that source. The imports from Western Europe included substantial tonnages of roping wire from west Germany and galvanized wire of relatively low unit value from Belgium/Luxembourg and West Germany. Most of the imports from Japan were entered through ports in British Columbia; they consisted largely of roping wire, wire for upholstery springs, and galvanized wire. Imports from the United States accounted for less than ten per cent of total imports by volume; they had, however a very high average value - \$747 per ton - and are believed to have consisted in large part of what might be termed specialties. They are known, for example, to have included substantial tonnages of valve spring wire entered under tariff item 438q which is outside the scope of the Reference, of wire with coatings other than zinc, and of shaped wire.

In 1964 the principal change in the pattern of imports was a sharp increase in imports of uncoated round wire from Japan. Total imports from that country are estimated to have reached 17,000 tons



in 1964 compared with 7,000 tons in 1963.

Exports of wire in 1964 amounted to about 5000 tons valued at about one million dollars. More than half the exports were to the United States.

### The Principal Proposals

There are seventeen tariff items or parts thereof within the present Reference which encompass steel wire, and they vary widely with regard to the volume of trade and domestic production to which they relate. Before discussing the relevant details of the issues surrounding each of these separate items, a summary of the principal proposals presented to the Board seems desirable.

Dosco and Stelco expressed concern over the number of end-use items relating to wire and sought rates based on the degree of processing involved rather than on end uses.

Stelco proposed that most steel wire be dutiable under three tariff items as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, round, uncoated, n.o.p.	10 p.c.	15 p.c.
Wire, of iron or steel, round, coated with zinc or spelter, n.o.p.	12½ p.c.	17½ p.c.
Wire, of iron or steel, n.o.p.	15 p.c.	20 p.c.

The company indicated that the progression of rates envisaged in the proposals was to take account of the increased labour content, investment and other factors involved in the production of progressively refined products.

An analysis of Stelco's proposals is contained in the table beginning on the following page. The principal way in which Dosco's proposals differed from those of Stelco was that the former proposed the deletion of a number of end-use tariff items covering special kinds of wire not actually made by either Dosco or Stelco; Stelco, on the other hand, restricted its proposals to tariff items covering goods actually manufactured by the company.

In 1963 imports under tariff items encompassed by the Stelco proposal from countries entitled to British preferential treatment amounted to \$4,606,000, and duties paid amounted to 2.3 per cent ad valorem; a large proportion of these imports consisted of roping wire which is duty free under the B.P. Tariff. Under Stelco's proposals, duties on these same imports under the B.P. Tariff would have amounted to slightly over 10 per cent ad valorem, the increase being due largely to the proposed duty of 10 p.c. which would apply to roping wire.



PROPOSALS RESPECTING WIRE BY THE STEEL CO. OF CANADA, LIMITED

		Existing and Proposed Rates		Imports in 1963		Total		Duties Collected	
		B.P.	M.F.N.	B.P.	M.F.N.	\$'000	\$'000	B.P.	M.F.N.
Proposal 1. <u>Wire, of iron or steel, round, uncoated,</u>									
n.o.p.									
To replace the following tariff items:									
401	Wire, of iron or steel:-	10 p.c.	15 p.c.						
(g)	N.o.p.								
402h	Wire of iron or steel, uncoated, curved or not, in coils, not more than 0.144 inch and not less than 0.080 inch in diameter, with tolerance not to exceed 0.004 inch, when imported by manufacturers of woven or welded wire fencing, for use in the manufacture of such fencing in their own factories...	15 p.c.	15 p.c.	500(a)	1,500(a)	2,000(a)		75	225
403	Wire, of steel:-	7½ p.c.	7½ p.c.	-	-	-		-	-
(a)	Spring, not less than .40 per centum, by weight, of carbon, when imported for use exclusively in the manufacture of springs for mattresses, cushions or upholstery:-								
	(i) .128, .116, .104 and .092 inch in diameter, with a tolerance not to exceed .003 inch.....	Free	5 p.c.)	-	250	250			13
	(11) .144, .080, .072, .064, .056 and .048 inch in diameter, with a tolerance not to exceed .003 inch	5 p.c.	5 p.c.)						

	<u>Existing and Proposed Rates</u>		<u>Imports in 1963</u>		<u>Duties Collected</u>	
	<u>B.P.</u>	<u>M.F.N.</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>B.P.</u>	<u>M.F.N.</u>
	\$'000	\$'000	\$'000	\$'000		
(c)						
Valued at not less than two and three-quarter cents per pound for use in the manufacture of wire rope.....	Free	5 p.c.	3,590	1,807	-	91
409(e)	Free	Free	(b)	(b)	(b)	
...wire...for baling farm produce						
Sub-total			4,090	3,557	75	328
Duties which would have been payable on the same imports under Stelco proposals					409	534

Existing and Proposed Rates		Imports in 1963		Duties Collected	
B.P.	M.F.N.	B.P.	M.F.N.	B.P.	M.F.N.
\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Proposal 2. Wire, of iron or steel, round, coated with zinc or spelter, n.o.p.</b>					
<b>To replace the following tariff items:</b>					
12½ p.c.	17½ p.c.				
<b>401 Wire, of iron or steel:-</b>					
Coated with zinc or spelter, curved or not, in coils, .144, .104, or .092 inch in diameter, with tolerance not to exceed .004 inch, and not for use in telegraph or telephone lines, n.o.p.	Free	10 p.c.	64(a)	144(a)	- 6
(e) Coated with zinc or spelter, n.o.p.	10 p.c.	20 p.c.	710(a)	856(a)	15 142
<b>402c Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories..</b>					
Free	Free	10 p.c.	-	-	-
<b>402d Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories</b>					
Free	Free	177(a)	490(a)	667(a)	-
Sub-total		403	1,264	1,667	148
<b>Duties which would have been payable on the same imports under Stelco proposals</b>					
		50			221



		Existing and Proposed Rates		Imports in 1963		Total		Duties Collected	
		B.P.	M.F.N.	B.P.	M.F.N.	\$'000	\$'000	B.P.	M.F.N.
<u>Proposal 3. Wire, of iron or steel, n.o.p.</u>		15 p.c.	20 p.c.						
To replace the following tariff items:									
401	Wire, of iron, or steel:-								
	...								
(c)	Drawn flat or cold rolled flat after drawing, coated or not, n.o.p., not more than .25 inch in width and less than .1875 inch in thickness	7½ p.c.	20 p.c.	35(c)	352(c)	387(c)	3	70	
(f)	Single or several, coated, n.o.p., or covered with any material, including cable so covered	15 p.c.	25 p.c.	78	496	574	12	124	
(g)	N.o.p.	15 p.c.	15 p.c.	(d)		(d)			
402f	Wire, cold drawn, galvanized, tempered or not, in coils of not less than 5,000 feet, for use in the manufacture of flexible outer casing for speedometer cables	Free	Free	(e)		(e)			
	Sub-total			113	848	961	15	194	
	Duties which would have been payable on same imports under Stelco proposals						17	170	
	Grand Total			4,606	5,669	10,275	105	671	
	Total duties which would have been payable on same imports under Stelco proposals						476	925	

## (a) Estimated

- (b) Imports not available but believed to account for only a small percentage of total wire imports
- (c) Includes imports under tariff item 403(b), about which Stelco made no representations
- (d) Imports are shown under the heading of proposal 1., where most of them would fall
- (e) Imports not available but are known to account for a small and decreasing percentage of total wire imports. This tariff item is discussed in the section of the Report entitled "Materials for Speedometer Parts"

Source: D.B.S. Trade of Canada, except where otherwise stated

In 1963 imports under the same tariff items from countries entitled to the M.F.N. Tariff amounted to \$5,669,000 and duties paid amounted to 11.8 per cent ad valorem. The average rate of duties paid was kept down to this level principally because of imports of roping wire at 5 p.c., galvanized wire for fencing duty free, and upholstery wire at 5 p.c. Under Stelco's proposals, duties on 1963 imports from M.F.N. countries would have averaged about 16 per cent ad valorem.

Those who would be affected adversely by the proposals of Stelco are the manufacturers of wire rope, fencing and other products for the manufacture of which wire can now be imported under end-use items. The positions taken by these and other interests are discussed along with other details respecting each broad class of wire in the pages which follow. The Council of the Forest Industries of British Columbia presented a brief of a more general nature in which end-use tariff items to assist export industries were supported. The Council opposed the increases in duty proposed by Dosco and Stelco.

### Roping Wire and Core Wire

Roping wire and core wire are covered by Tariff Item 403(c) which is as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
403 Wire, of steel:-		
... (c) Valued at not less than two and three-quarter cents per pound for use in the manufacture of wire rope	Free	5 p.c.

The manufacturers of wire rope have all their imports of roping wire entered under tariff item 403(c); the value limitation in the item is of many years' standing, and for some time has had no restrictive effect. In addition to what is commonly regarded as roping wire, a product known as core wire is also permitted entry under the item. Core wire is used for processing into a kind of strand which, in turn, is used in the manufacture of aluminum cable steel reinforced (A.C.S.R.). On the other hand, wire which is to be used only for the manufacture of strand such as clothesline wire and guy wire, and not to be processed beyond that stage, is not eligible for entry under tariff item 403(c).

Roping Wire - Roping wire is a high carbon, patented steel wire produced to rigid specifications in a variety of sizes and qualities. It is made from selected and carefully prepared steel, and in the drawing process many refinements are observed which are not required in the production of most other kinds of steel wire. Whereas a low carbon bright wire sells at about \$150 per ton and galvanized fencing wire at about \$200, most roping wire is priced at between \$250 and \$300 per ton.

There are now three producers of roping wire in Canada - Dosco, Stelco, and Webster and Horsfall. Dosco and Stelco are by far

the largest producers. Stelco has been producing roping wire since the 1930's; Dosco and Webster and Horsfall began production in the early 1950's. Judging from the evidence at the public hearing the Canadian product is of high quality. The capacity of the Canadian producers is more or less in line with the share of the market they now enjoy, but the Board was told that the additional ancillary facilities which would be required to increase capacity could be installed very quickly if the producers could obtain a larger share of the Canadian market. However, as noted below, the Canadian producers are not supplying the major part of the Canadian market. A fairly good estimate of the size of the market can be obtained from statistics of imports of roping wire and core wire and Canadian factory shipments of fully manufactured wire rope.

<u>Year</u>	<u>Imports of Roping Wire and Core Wire</u> (tons)	<u>Factory Shipments of Steel Wire Rope and Cable</u> <sup>(a)</sup> (tons)
1938	5,409	8,300 <sup>(b)</sup>
1939	6,280	9,800 <sup>(b)</sup>
1955	16,092	23,658
1956	24,292	30,006
1957	17,879	28,304
1958	15,098	24,182
1959	20,622	26,109
1960	20,550	25,746
1961	16,614	23,459
1962	19,778	26,518
1963	21,315	27,079
1964	20,994 <sup>(b)</sup>	29,062

<sup>(a)</sup> Includes certain kinds of multiple strand not regarded as wire rope or cable; it is known that prior to 1961 shipments of these other types of multiple strand amounted to between one and two thousand tons annually

<sup>(b)</sup> Estimated

Source: D.B.S. Catalogue Numbers 41-006, 41-216 and Trade of Canada

A spokesman for Dosco estimated that, with consumption of roping wire, excluding core wire, running at around 25,000 tons per year, imports amounted to around 16,000 tons annually and Canadian factory shipments of roping wire to about 9,000 tons annually. Imports thus were supplying about 2/3 of requirements of roping wire. This appears to be a fairly good estimate; on the basis of confidential information available to the Board, imports of roping wire appear to have varied from about 14,000 tons to about 17,000 tons in recent years. Imports of core wire are believed to have been of the order of three or four thousand tons annually in 1963 and 1964.

Imports under tariff item 403(c) by countries of origin are presented on the following page. Great Britain has normally been the largest supplier to Canada although this position was occupied by the



IMPORTS: WIRE, STEEL, FOR WIRE ROPE, s.c. 5901  
Tariff Item 403(c)

Year	United Kingdom		Germany		Japan		United States		Other		Total	
	Ton	\$/Ton	Ton	\$/Ton	Ton	\$/Ton	Ton	\$/Ton	Ton	\$/Ton	Ton	\$/Ton
1955	9,588	210.96	295	202.91	-	-	6,135	273.40	74	229.86	16,092	234.70
1956	15,593	224.78	1,128	222.97	-	-	7,387	281.08	184	231.19	24,292	241.87
1957	15,012	225.62	1,045	211.02	50	269.86	1,646	305.02	125	219.40	17,879	232.14
1958	12,381	234.60	1,564	209.10	65	223.66	1,022	344.90	66	182.61	15,098	239.15
1959	15,990	229.58	3,587	209.70	460	201.74	585	388.25	-	-	20,622	230.00
1960	14,928	232.97	3,836	225.95	1,360	213.19	426	390.47	-	-	20,550	233.61
1961	11,769	245.20	3,027	243.67	1,648	202.26	167	488.44	2	427.50	16,614	243.12
1962	12,616	259.75	3,785	262.49	2,973	206.33	223	491.48	180	170.53	19,778	254.03
1963 (a)	13,906	258.14	3,708	279.78	3,524	198.35	30	1,482.57	146	179.28	21,315	253.19
1964	..	..	..	..	..	..	..	..	..	..	20,994	255.98

(a) Estimated on the basis of nine months data

Source: D.B.S. Trade of Canada

United States during and immediately after World War II. More recently, imports from the United States have been small, and Germany and Japan have become important suppliers. Imports in total have been relatively stable since 1959.

There are a number of factors which appear to have contributed to the relatively large imports of roping wire. The Canadian product in most grades and sizes is not competitive in price with imports on the west coast. Some grades and sizes can also be imported into Eastern Canada more cheaply than they can be obtained in Canada. A few qualities and shapes are not made in Canada. Finally, there are indications that the purchasing tendencies of some wire rope manufacturers are influenced by less tangible factors, such as commercial connections of long standing and common ownership.

Imports entered through west coast ports accounted for 41 per cent of total imports by volume in 1961 and 46 per cent in 1962; this was equivalent to about one third of Canadian consumption. There are two manufacturers of wire rope in Vancouver, and they import all but a very small proportion of their requirements of roping wire. As has already been noted, Canadian roping wire is not competitive in price on the West Coast.

About two thirds of Canadian consumption of roping wire is by plants in the East, and about half of these requirements are imported, the other half being supplied principally by Dosco and Stelco. Nearly all Canadian production of roping wire is sold to five rope manufacturing plants which are located in Ontario and Quebec. These plants also account for virtually all the imports into Eastern Canada. The substantial imports made by these companies are here discussed in the light of the factors noted above.

The Board compared eastern Canadian prices of a large number of roping wires with the landed costs of imports. It was found that, over a broad range of sizes, the prices of the Canadian products were either lower than or equal to the landed costs of imports from Great Britain. It was in the finer sizes that the Canadian product was not competitive in price, although the differences were often small.

The spokesman for Dosco estimated that between 60 and 70 per cent of the roping wire used in Eastern Canada was in the range of sizes with which his company was competitive in price. The spokesman for the wire rope manufacturers considered that this estimate was too high, and he suggested a figure of 50 per cent.

While the Canadian producers offer for sale a broad range of roping wires suitable for most purposes, there are some kinds not yet made in Canada. The spokesman for the wire rope manufacturers pointed out that roping wire in shapes other than round were not made in Canada, and he estimated that such wires accounted for about five per cent of consumption. In addition, he said that wires in certain tensile strengths were not made in Canada.

Reference was also made to roping wire made from what is known as acid grade steel; some imports from the United Kingdom consist of acid grade roping wire. Acid grade steel is produced in

furnaces with a particular kind of lining which imparts certain qualities to the steel. In contrast to acid grade steel, all the steel produced in Canada and most of that produced in the United States is basic grade.

Some users of wire rope consider that wire rope of acid grade steel is superior to wire rope which can be produced from basic grade steel. As a consequence they specify acid grade steel when ordering wire rope for certain purposes, especially in mining. The Canadian steel producers asserted that, with modern methods of steel production, roping wire made from basic steel was as good as that made from acid grade and there was general agreement that this was the case. Nevertheless a spokesman for the wire rope manufacturers estimated that perhaps ten per cent of Canadian users of wire rope still specified acid grade steel in their wire rope, especially when for use in mine hoists.

With regard to other factors favouring imports of roping wire, the Canadian producers made it very clear at the public hearing that they attributed the high level of imports in part to the fact that British and German interests owned much of the wire rope industry in Canada. At one point in the public hearing a spokesman for Dosco said:

"We are at a loss (to) discern why we can't sell when we are competitive price wise, cost wise and within two miles of local plants, aside from plants on the west coast." (1)

A spokesman for Stelco was asked to comment on the reasons for the imports of roping wire, and he said:

"The duty-free condition is one thing...; another condition is that some of the Canadian rope makers are affiliated with suppliers in Britain and West Germany." (2)

In this connection, a spokesman for the wire rope manufacturers made the following statement:

"This is not as it used to be in the old days. It is not any more a major factor in our policy of buying wire. We are in a highly competitive market and are obliged to buy wire from the most competitive source having regard to quality and availability." (3)

As will have been noted, quality in roping wire has many dimensions and there is considerable latitude for differences of opinion even among experts as to the relative merits of roping wire obtained from different sources. However, the Board did note a tendency for wire rope manufacturers to import from the countries where their affiliates are located. This applied both to British-owned firms and German-owned firms. (4)

Core Wire - Dosco and Stelco are both producers of core wire, which is a galvanized wire of high tensile strength for use in manufacturing the

(1) Transcript, November 4, 1963, p. 283

(2) Same, November 4, 1963, p. 99

(3) Same, November 7, 1963, p. 644

(4) Information respecting the control of the wire rope industry is contained in the following section dealing with wire rope



steel strand component of aluminum cable, steel reinforced (A.C.S.R.); this kind of cable is produced by a number of manufacturers of electrical wire and cable, and has largely replaced copper in electrical transmission lines because of savings in weight and costs. The size of the market for core wire can only be estimated indirectly through shipments of A.C.S.R. The value of factory shipments of bare A.C.S.R. and aluminum wires and cables has been as follows:

Year	Value of Factory Shipments \$'000
1959	13,375
1960	15,014
1961	14,043
1962	16,266
1963	22,476

Source: D.B.S. Catalogue Number 43-209

A large part of these shipments is believed to have consisted of ACSR containing core wire. The cost of core wire is equivalent to about 15 per cent of the selling value of ACSR. On this basis, the market for core wire in Canada would appear to be of the order of \$2 to \$3 million annually; at a price of about \$250 per ton this would amount to perhaps eight to twelve thousand tons of core wire annually.

The production of ACSR, and consequently the demand for core wire, fluctuates considerably from year to year. It depends upon the mileage of electrical transmission lines being installed in Canada, and on exports of ACSR which are very substantial in some years. While statistics of imports of core wire are not available, they are believed to vary widely from year to year, and have probably amounted to as much as 4,000 tons in some years. It is clear that imports of core wire have supplied a substantial share of the market.

Representations and Proposals - Dosco and Stelco both proposed that tariff item 403(c) under which roping wire and core wire are imported, Free, B.P. and at 5 p.c., M.F.N., be deleted. Under their proposals, roping wire and core wire would become dutiable at the following rates:

	<u>B.P.</u>	<u>M.F.N.</u>
Round, uncoated	10 p.c.	15 p.c.
Galvanized	12½ p.c.	17½ p.c.
Other	15 p.c.	20 p.c.

The word "other" in this proposal would embrace shapes other than round and coatings other than galvanized.

Webster and Horsfall (Canada) Limited proposed that tariff item 403(c) be retained without any change in rates but that the minimum of 2½ cents per pound value specified in the item be revised

upwards. The present minimum value is equivalent to \$55 per ton, a figure well below current values of wire. The company described the present minimum value as "an invitation to dump".

The manufacturers of wire rope, in a joint submission, proposed that tariff item 403(c) be retained without any change in rates but that it be worded as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, for use in the manufacture of wire rope and strand	Free	5 p.c.

The removal of the value limitation, as proposed by the wire rope manufacturers, would have no effect on the coverage of the item, but the inclusion of the word "strand" would broaden the coverage and would have the effect of reducing the rates on wire for use in the manufacture of strand.

The Council of the Forest Industries of British Columbia proposed that tariff item 403(c) be left unchanged.

The Institute of Iron and Steel Wire Manufacturers, Great Britain, made proposals which would have the effect of leaving roping wire duty free under the B.P. Tariff and of raising the most-favoured-nation rate to 10 p.c. or 12 $\frac{1}{2}$  p.c., depending upon the shape of the wire.

Both Dosco and Stelco expressed strong opposition to continuation of tariff item 403(c). The following were among the arguments they advanced:

1. The rates under tariff item 403(c), free, B.P. and 5 p.c., M.F.N., are out of proportion to the rates under which the greater part of wire rope imports are made, namely 15 p.c., B.P. and 25 p.c., M.F.N. under tariff item 401(b).
2. When the low rates for roping wire were established many years ago, roping wire was not produced in Canada. It is now produced in substantial quantity and, if the demand warranted, productive facilities could quickly be expanded to supply the market.
3. Interpreted as it now is to encompass core wire, tariff item 403(c) has become broader than originally intended. The steel producers were as opposed to the entry of core wire under the item as they were to the entry of roping wire at those rates.
4. Both companies expressed the view that the large imports of roping wire were connected in part with external ownership of the wire rope industry in Canada.

These reasons were advanced in the context of the general submissions of the two companies, in calling for the elimination of end-use items and the establishment of three tariff items covering wire in successive stages of finish and shape.



Webster and Horsfall, while proposing that tariff item 403(c) be left unchanged, pointed to the high level of roping wire imports. Their spokesman stated:

"The...situation exists in spite of the fact that current Canadian rope wire prices are competitive with imported prices. While it is realised that a tariff change would seriously threaten an already hard pressed industry, it is felt that the rope manufacturers should make more use of Canadian wire in their own interests.

"The position in times of strike and strife in Europe or in Ocean Transport would be most difficult without Canadian capacity to call on. The imposition of a tariff would not be in the interests of the Wire Rope Industry but neither is neglect of Canadian capacity to supply the needs of that industry."(1)

The increases in duties proposed by Dosco and Stelco were opposed by the wire rope manufacturers, whose spokesman stated:

"Wire accounts for at least 60% of the sales value of wire rope, thus...the cost of wire to the domestic manufacturer is a most vital factor in his operation. Most grades of this special type of wire are available from domestic producers in limited quantities at a higher cost than from sources outside Canada. Several types of roping wire used by our industry are not even produced in Canada. While the Canadian wire rope manufacturers have always purchased a substantial portion of their raw material requirements from domestic producers, any tariff increase on imported roping wire would, as already stated, result in ruinous cost increases to all members of our industry and especially to the two Western manufacturers with their added burden of high freight costs from domestic suppliers, all of whom are located in eastern Canada."(2)

The position of the wire rope industry is discussed at greater length in a subsequent part of this report dealing with the duties on wire rope.

#### Other Round, Uncoated Wire

Round uncoated wire other than roping wire is provided for in tariff items 401(g); 402h; 403(a); 403(d); 403(h); 409e(3) and 596a. In addition to the n.o.p. provisions of tariff item 401(g), these items provide for a number of specific end uses at a variety of rates. The general provisions of tariff item 401(g) are by far the most important in terms of volume of imports entered thereunder. Total imports under all the end-use items in this group are well under one million dollars. Two of the more significant items are wire for upholstery springs (tariff item 403(a)) and music wire for mechanical springs (403(h)).

(1) Transcript, November 7, 1963, p. 691

(2) Same, November 7, 1963, p. 625-626



The following table shows imports entered under this group of tariff items, by principal countries of origin.

IMPORTS OF ROUND UNCOATED WIRE  
OTHER THAN ROPING WIRE  
s.c. 5903 and 5905(a)

<u>Country</u>		<u>1951</u>	<u>1956</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u> <sup>(b)</sup>
U.K.	Ton	627	642	2,151	1,087	1,389	..
	\$'000	177	180	603	439	512	..
Belgium-Lux.	Ton	596	1,722	931	3,163	1,036	..
	\$'000	104	248	133	349	158	..
France	Ton	44	651	928	1,444	657	..
	\$'000	9	68	100	157	78	..
Germany W.	Ton	839	240	970	359	177	..
	\$'000	152	32	109	40	35	..
Japan	Ton	-	147	2,660	2,826	2,467	..
	\$'000	-	19	398	421	400	..
U.S.	Ton	15,951	12,659	1,714	1,696	1,921	..
	\$'000	3,469	3,225	1,115	1,189	1,444	..
Others	Ton	107	315	1,168	1,979	1,099	..
	\$'000	27	94	251	367	226	..
TOTAL	Ton	18,164	16,376	10,522	12,462	8,746	16,390
	\$'000	3,938	3,865	2,709	2,963	2,854	4,474

(a) Includes imports under tariff item 438q which is not in the Reference

(b) Estimated on the basis of nine months data

Source: D.B.S. Trade of Canada

In comparison, total production of plain round wire amounted to 385,000 tons in 1963 and 459,000 in 1964; of the total production in 1963, about 80,000 tons consisted of roping wire and of wire destined for further processing into galvanized and other coated wire. The remaining 305,000 odd tons were either sold as uncoated round wire or retained by the manufacturers for further processing into nails, concrete reinforcing mesh and other products many of which require specialty grades of wire.

Altogether therefore, imports of uncoated round wire, other than roping wire, have been small in relation to the size of the Canadian market; in 1963 such imports accounted for less than five per cent by volume of total supply. Japan, the United States and Great Britain have been the principal suppliers. Most of the increase in

1964 came from Japan, which supplied over half the total volume of imports.

Behind these overall averages, there are differences in the significance of imports entered under the different tariff items involved; each of these tariff items is discussed in turn below.

Tariff Item 401(g) -

	<u>B.P.</u>	<u>M.F.N.</u>
401 Wire, of iron or steel:		
(g)     n.o.p.	15 p.c.	15 p.c.

This item encompasses principally uncoated round wire not provided for elsewhere. Shaped wire, in forms other than flat, and flat wire other than in the dimensions specified in tariff item 401(c), are also entered under tariff item 401(g), although the market for such products is small.

Imports entered under tariff item 401(g) are not available separately, but independent estimates by Dosco and by the Board place them at around \$1.8 million annually in the past few years; they were somewhat higher than that in 1964 due to increased imports from Japan. A wide variety of wire is entered under this item, a considerable proportion of which consists of types made in Canada; some are special products not made in Canada. The principal sources of imports have been Japan, the United States and Great Britain.

Under the proposals of both Dosco and Stelco, most of the products now falling under tariff item 401(g) would become dutiable under a new item worded as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, round, uncoated, n.o.p.	10 p.c.	15 p.c.

A reduction of five percentage points in the British preferential rate was thus contemplated in the proposals of the two companies.

A very small proportion of products now falling under tariff item 401(g) would be provided for in another item proposed by Dosco and Stelco as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire of iron or steel, n.o.p.	15 p.c.	20 p.c.

Both companies made it clear that their proposals respecting tariff item 401(g) were related to other proposals they had made which would have the effect of eliminating most or all end-use items under which plain round wire is now imported at rates lower than those provided for under tariff item 401(g).

Irving Wire Products Limited expressed satisfaction with the existing rates under tariff item 401(g).

The manufacturers of mechanical springs expressed support for the proposals of Dosco and Stelco but, for technical reasons, they proposed that the item be re-worded as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, uncoated or coated with a lubricant to facilitate drawing only	10 p.c.	15 p.c.

The manufacturers of mechanical springs reported that, in making their proposal, they were concerned about stainless steel wire which is coated to facilitate drawing and to facilitate coiling into springs. They considered that such wire should bear the same rates of duty as uncoated wire.

Vanadium-Alloys Steel Canada Limited proposed the creation of an item to be worded as follows:

Coated stainless steel wire for use in the cold heading industry

With regard to rates of duty, the company proposed that they be not higher than 15 p.c.

According to the spokesman for the company, stainless steel wire coated with soap has been entered under tariff item 401(g), so that the proposed item would affect the coverage of tariff item 401(g) to that extent. Further reference to the proposal of Vanadium-Alloys is made below in the section on Round Wire with Coatings other than Zinc - tariff item 401(f).

Webster and Horsfall (Canada) Limited proposed rates of 5 p.c., B.P. and 20 p.c., M.F.N.; The Canadian Importers Association proposed 10 p.c., B.P. and 15 p.c., M.F.N.; Wirth Limited proposed 7½ p.c., B.P. and 15 p.c., M.F.N.; The Institute of Iron and Steel Wire Manufacturers, Great Britain, made proposals which would have the effect of reducing the British preferential rate on goods now entered under tariff item 401(g) to Free, and of reducing the most-favoured-nation rate to 10 p.c. on round wire and to 12½ p.c. on flat wire.

Tariff Item 402h -

	<u>B.P.</u>	<u>M.F.N.</u>
402h Wire of iron or steel, uncoated, curved or not, in coils, not more than 0.144 inch and not less than 0.080 inch in diameter, with tolerance not to exceed		



B.P.M.F.N.

## 402h (Cont'd.)

0.004 inch, for use in the  
manufacture of woven or welded  
wire fencing.....

7½ p.c.

7½ p.c.

This item provides for uncoated wire imported by manufacturers of fencing. It was established by Order-in-Council in 1956, and duty-free entry under the B.P. and M.F.N. tariffs was provided until 1961 when the present rates were established. While some limited use was made of the item for a time, imports under it are believed to have ceased. Most wire for fencing must be galvanized, and those Canadian manufacturers of fencing who have galvanizing facilities also have wire drawing facilities. Consequently, while manufacturers of fencing do import rod and galvanized wire, they buy little or no uncoated wire.

Dosco and Stelco both proposed that the item be deleted. Imports, if any, would then fall under tariff item 401(g) or under the item which the companies proposed to replace tariff item 401(g).

The institute of Iron and Steel Wire Manufacturers, Great Britain, proposed that goods now dutiable under tariff item 402h be made dutiable at B.P., Free and M.F.N., 10 p.c. under a tariff item of more general application.

Tariff Item 403(a) -B.P.M.F.N.

403

Wire of steel:-

(a) Spring, not less than .40  
per centum, by weight, of  
carbon, when imported for  
use exclusively in the  
manufacture of springs for  
mattresses, cushions or  
upholstery:-

(i) .128, .116, .104 and .092  
inch in diameter, with a  
tolerance not to exceed  
.003 inch.....

Free

5 p.c.

(ii) .144, .080, .072, .064,  
.056 and .048 inch in  
diameter, with a toleran-  
ce not to exceed .003  
inch.....

5 p.c.

5 p.c.

Imports under tariff item 403(a) have been as follows:

IMPORTS OF SPRING STEEL WIRE FOR MATTRESSES  
CUSHIONS OR UPHOLSTERY (S.C. 5903)

Year	United States		Japan		Other		Total	
	tons	\$'000	tons	\$'000	tons	\$'000	tons	\$'000
1948	2,413	330	-	-	-	-	2,413	330
1951	5,153	822	-	-	355	-	5,508	889
1956	2,812	528	-	-	1	-	2,813	528
1959	37	7	209	35	*	*	246	43
1960	114	24	309	52	-	-	423	76
1961	1	*	968	168	-	-	969	168
1962	174	40	1,501	263	2	*	1,677	303
1963	111	25	1,245	224	-	-	1,356	250
1964(a)	..	..	..	..	..	..	1,639	274

(a) Estimated

Source: D.B.S., Trade of Canada.

While Canadian factory shipments of similar types of wire are confidential, the imports of recent years are known to have supplied only a small part of the market and to have been restricted almost entirely to the West.

Dosco and Stelco both proposed the deletion of tariff item 403(a). Under their proposals, the products now classified under the item would come under the following proposed new item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, uncoated, round, n.o.p.	10 p.c.	15 p.c.

Webster and Horsfall proposed that the rates under tariff item 403(a) be raised to 10 p.c., B.P. and 15 p.c., M.F.N. The Institute of Iron and Steel Wire Manufacturers proposed rates of Free, B.P. and 10 p.c., M.F.N. or 12½ p.c., M.F.N., depending on shape.

As a spokesman for one of the steel producers pointed out at the public hearing, the beneficiaries of tariff item 403(a) made no appearance and did not request the retention of the item. The following are the rates applying to furniture springs, furniture and mattresses:

<u>Product</u>	<u>Tariff Item</u>	<u>B.P.</u>	<u>M.F.N.</u>
Furniture springs	405b	20 p.c.	25 p.c.
Furniture	519	15 p.c.	25 p.c.
Mattresses	580	20 p.c.	25 p.c.

In support of his company's proposal, a spokesman for Stelco said:

"In view of the additional testing and other manufacturing refinements required to produce this type of wire, it is logical that it should bear a rate of duty at least equivalent to that provided for the less exacting grades of wire." (1)

Tariff Item 403(d) -

B.P.

M.F.N.

403 Wire, of steel:-

(d) Single, not covered, in coils,  
for use exclusively in trolling  
in bona fide deep sea or inland  
commercial fishing operations..

Free

7½ p.c.

The wire encompassed by this item is a high alloy composition. It is not offered for sale by Dosco or Stelco, and the Board did not hear of any Canadian manufacturer of the product. It is used principally in commercial trolling for salmon on the west coast.

Stelco made no proposal respecting the item, but Dosco proposed its elimination. Under Dosco's proposals, the product now entering under tariff item 403(d) would become dutiable under the following proposed item:

B.P.

M.F.N.

Wire, of iron or steel, uncoated,  
round, n.o.p.

10 p.c.

15 p.c.

The Fisheries Council of Canada sent in a proposal that the item be retained and that the M.F.N. rate be reduced to Free. Proposals by the Institute of Iron and Steel Wire Manufacturers, Great Britain, would have the effect of leaving the B.P. rate duty free and of raising the most-favoured-nation rate to 10 p.c.

Tariff Item 403(h) -

B.P.

M.F.N.

403 Wire, of steel:-

(h) Spring steel music wire,  
coated or not, having a  
tensile strength of not  
less than two hundred and  
thirty thousand pounds per  
square inch, for the manu-  
facture of mechanical  
springs.....

12½ p.c. 12½ p.c.



Spring steel music wire, as provided for in tariff item 403(h) when for use in the manufacture of mechanical springs, is a particularly high quality type of steel mechanical spring wire. The term music wire is a technical one, and the wire encompassed by this item has many industrial uses. Neither Dosco nor Stelco manufactures spring steel music wire. Webster and Horsfall (Canada) Limited does manufacture limited quantities suitable for some purposes, but the manufacturers of mechanical springs stated that none suitable for their applications was made in Canada.

The cost of spring steel music wire is four or five times that of other grades of spring steel wire, and it is used mainly in fine sizes.

The Board made a survey of manufacturers accounting for most of the production of steel mechanical springs. In 1963 the factory shipments of steel mechanical springs by the firms in the survey were valued at about six and one-half million dollars. In the same year these firms purchased spring wire costing \$1.9 million. Of this amount \$155,000 consisted of music spring steel wire, nearly all of it imported.

Stelco made no proposals respecting tariff item 403(h), but Dosco proposed that, in the interest of consolidation, tariff item 403(h) be deleted. The spokesman for Dosco proposed that the goods now falling under the item be made dutiable along with other kinds of wire under the following proposed item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, uncoated, round, n.o.p.	10 p.c.	15 p.c.

This proposal would mean a reduction of  $2\frac{1}{2}$  percentage points in the B.P. Tariff and an increase of  $2\frac{1}{2}$  percentage points in the M.F.N. Tariff.

Webster and Horsfall (Canada) Limited, the only manufacturer in Canada of spring steel music wire, proposed that tariff item 403(h) be retained but that the British preferential rate be reduced to Free and that the most-favoured-nation rate be reduced to 10 p.c. In support of their proposals, their spokesman stated:

"...we strongly urge the creation of a British Preferential rate for Music Wire in the interests of Canada's Trade Balance problems. We also feel that we can compete with British imports at current costs. If the M.F.N. rate were reduced to 'Free', however, it would probably mean that this small but growing sector of our business would seriously suffer." (1)

The manufacturers of mechanical springs proposed that tariff item 403(h) be retained but that duty-free entry be provided under

(1) Transcript, November 7, 1963, p. 692

both the British Preferential and the Most-Favoured-Nation Tariffs. While conceding that steel music wire for some applications was made in Canada, the spokesman for the spring manufacturers contended that music wire suitable for the production of mechanical springs was not made in Canada.

Proposals made by the Institute of Iron and Steel Wire Manufacturers, Great Britain, would have the effect of providing free entry under the B.P. Tariff for wire now classified under tariff item 403(h), and of reducing the most-favoured-nation rate to 10 p.c. on wire other than flat; under their proposed system of classification the most-favoured-nation rate on flat wire would be left at 12½ M.F.N.

Tariff Item 409e(3) -

	<u>B.P.</u>	<u>M.F.N.</u>
409e(3) ....wire.....for baling farm produce	Free	Free

The Board is concerned with this item in so far as it relates to wire for baling farm produce. Hay baler wire and bale ties are believed to be the principal products involved. A spokesman for Stelco indicated that the item is used principally for wire used in baling of hay for the export market, so that a 99 per cent drawback would be available on any duties paid on such wire, when exported.

While it is known that there are some imports of wire under tariff item 409e(3), a spokesman for Dosco expressed the view that they were comparatively small in quantity.

Both Dosco and Stelco proposed that tariff item 409e(3), in so far as it relates to wire, be deleted. Under each of their proposals, wire for baling farm produce would then become dutiable under the following proposed item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, uncoated, round, n.o.p.	10 p.c.	15 p.c.

The Canadian Federation of Agriculture expressed opposition to any duties on wire or wire products used by farmers. Wirth Limited, an importer of steel, proposed continued free entry under tariff item 409e(3). A proposal made by the Institute of Iron and Steel Wire Manufacturers, Great Britain, would have the effect of leaving the British preferential rate on baling wire Free and of raising the M.F.N. rate to 10 p.c.

Tariff Item 596a -

	<u>B.P.</u>	<u>M.F.N.</u>
596a Steel music wire for use in the manufacture of piano strings.....	10 p.c.	10 p.c.

The steel music wire used in piano strings is similar in quality to the spring steel music wire provided for in tariff item 403(h), although the requirements of the piano manufacturers are extremely exacting. Webster and Horsfall has been able to supply wire suitable for some of the applications of the piano manufacturers, but by far the greater proportion of wire for piano strings is still imported. The total Canadian market is small, amounting to only about \$25,000 annually.

Dosco proposed that tariff item 596a be deleted. Wire for piano strings would then become dutiable under the following item proposed by Dosco:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel:-		
Uncoated, round, n.o.p.	10 p.c.	15 p.c.

Webster and Horsfall, and the Institute of Iron and Steel Wire Manufacturers, Great Britain, both made proposals which would have the effect of reducing the British preferential rate on wire for piano strings to Free.

#### Round Galvanized Wire

The following are the principal tariff items providing for round galvanized wire:

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
401 Wire of iron or steel:-			
...			
(d) Coated with zinc or spelter, curved or not, in coils, .144, .104, or .092 inch in diameter, with tolerance not to exceed .004 inch, and not for use in telegraph or telephone lines, n.o.p.....	Free	10 p.c.	10 p.c.
(e) Coated with zinc or spelter, n.o.p.....	10 p.c.	20 p.c.	20 p.c.
402c Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manu-			



402c (Cont'd.)	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
facture of barbed fencing wire or of wire fencing, in their own factories.....	Free	10 p.c.	10 p.c.
402d Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories.....	Free	Free	Free

Galvanized roping wire and core wire are entered under tariff item 403(c), which was discussed in the section dealing with roping wire and core wire.

Tariff item 401(d) has been in existence since 1906, and it has always provided either for free entry or entry at relatively low rates of duty. The three sizes of galvanized wire provided for under the item are equivalent to gauges 9, 12, and 13, which are widely used in the manufacture of fencing. The item was probably created to assure the availability of adequate supplies of wire for agricultural fencing at reasonable prices. In 1935, following a report by the Tariff Board,<sup>(1)</sup> tariff item 402c was introduced in its present form. Since it provides for galvanized wire in all gauges from 9 to 14 inclusive when for fencing, it may be said to have replaced tariff item 401(d) as far as fencing wire is concerned. Then, with the creation of tariff item 402d in 1947, tariff item 402c appears to have become superfluous.

Nearly half the supply of galvanized wire in Canada is used in fencing. In 1964, the supply of galvanized wire amounted to about 85,000 tons, and the production of fencing amounted to 33,000 tons, as shown below:

	<u>Production of Fencing</u> (tons)	
	<u>1963</u>	<u>1964</u>
Barbed wire	6,935	5,751
Farm fencing	13,772	14,572
Chain link fencing	10,046	11,349
Lawn fencing	1,504	1,002
Total	32,257	32,674

Source: D.B.S. Catalogue Number 41-006

<sup>(1)</sup> Wire Coated with Zinc or Spelter, Reference 35, Tariff Board, Ottawa, 1935

There are numerous other uses of galvanized wire; it is used as core wire and guy wire and it is used for the manufacture of stucco reinforcing mesh and a variety of weather-proof fastenings, and many other products.

An investment of several millions of dollars is required to provide a galvanizing line capable of producing a wide range of products at low cost; on the other hand, galvanizing facilities for a limited range of products could probably be installed for less than one-half million dollars. The process involves a variety of wire cleaning operations and then of running the wire through a bath of molten zinc. The wire is generally annealed prior to galvanizing by passing it through molten lead, molten salt, or through a furnace. Most galvanized wire is produced in this way although some is coated with zinc by an electrolytic process.

Dosco and Stelco account for a very large part of the production of galvanized wire and for virtually all the sales on the open market. There are two other companies which are known to have facilities for galvanizing wire in limited quantities and sizes. The B. Greening Wire Company produces its own galvanized wire which it uses principally in the manufacture of hexagonal mesh. General Wire and Cable also has galvanizing facilities which it uses to make galvanized wire for use principally in the lighter gauges of chain link fence. Altogether, a spokesman for Dosco estimated total Canadian wire galvanizing capacity at 89,700 tons annually.

The following table shows how the selling prices per hundred pounds of some widely used sizes of low carbon wire are enhanced by galvanizing in Canada:

	9 ga.	11 ga.	12 ga.	16 ga.
Base price	7.20	7.20	7.20	7.20
Extra for size	.25	.40	.45	1.05
Chemistry extra	.15	.15	.15	.15
Total, uncoated bright	7.60	7.75	7.80	8.40
Galvanizing	1.70	1.70	1.75	2.50
Total, galvanized	9.30	9.45	9.55	10.90

In comparison, galvanized wire is priced at about 75 cents above bright uncoated in Japan and at about one dollar above bright uncoated in Europe.

Galvanizing charges can run considerably higher than those indicated where special qualities or small gauges are required. Taking the examples in the table above, the process of galvanizing involves annealing as well so that the charge shown for "galvanizing" includes annealing. The price of black annealed wire is about 85 cents higher than the price of bright uncoated wire, and neither Dosco nor Stelco proposed higher rates for the annealed. Altogether, in comparison with other factors such as chemistry and size, the amount by which galvanizing enhances the price is therefore not particularly large. For example, most uncoated roping wire is considerably more expensive than

galvanized wire for fencing, and requires as much or more in the way of specialized processing equipment.

The statistics of production of galvanized wire and imports of galvanized wire other than core wire are contained in the following table:

Year	Production tons	Imports by Tariff Items <sup>(a)</sup>				Exports tons
		401(d) tons	401(e) tons	402d tons	Total tons	
1953	54,149	10	574	1,084	1,668	..
1956	72,244	26	1,704	815	2,545	..
1957	53,987	722	2,107	790	3,619	..
1958	56,115	832	2,160	1,812	4,805	..
1959	62,240	828	2,851	4,490	8,168	..
1960	52,937	836	1,742	4,386	6,963	..
1961	56,933	1,536	2,224	3,986	7,744	549
1962	64,618	1,055	2,523	3,684	7,264	1,252
1963	68,987	925	3,977	4,240	9,141	1,043
1964	76,369	..	..	..	8,963 <sup>(b)</sup>	831

(a) Includes imports under tariff items 402e and 402f, which have been small in relation to the totals shown in the table. Excludes imports of galvanized core wire, which are estimated to have amounted to as much as 4,000 tons in some years.

(b) Estimated.

Source: D.B.S. Catalogue Number 41-006, Trade of Canada.

Nearly half the imports by volume in 1963 were cleared through ports in British Columbia, most of the remainder having been cleared through Ontario and Quebec. The greater part of the imports into eastern Canada were entered duty free for the manufacture of fencing, and the imports into the west were mostly dutiable and destined for a variety of uses.

#### IMPORTS OF GALVANIZED WIRE BY PROVINCES, 1963<sup>(a)</sup>

	Net tons	\$000
Newfoundland	9	2.6
Nova Scotia	90	31.9
Prince Edward Island	19	3.0
New Brunswick	64	12.5
Quebec	994	172.4
Ontario	3,629	777.9
Manitoba	104	31.0
Saskatchewan	-	-
Alberta	1	0.2
British Columbia	<u>4,230</u>	<u>636.4</u>
Total	<u>9,141</u>	<u>1,667.0</u>

(a) s.c. 5907; excludes galvanized core wire

Source: D.B.S.



The principal reason for the increase in imports of galvanized wire in recent years appears to have been a matter of price. Thomas quality galvanized wire from Europe has been much cheaper than the open hearth quality Canadian product, and it has apparently proven satisfactory for use in the lighter gauges of chain link fencing, stucco reinforcing mesh and other products not calling for the highest quality. In 1964 Japan became the largest single source of imports of galvanized wire. Imports from Great Britain, which are understood to consist largely of high quality products, have declined since 1961. Whereas the prices of European galvanized wire have declined along with the decline in prices of wire rod, the prices of Canadian galvanized wire have not declined although the producers have made some price concessions to particular users in an effort to meet import competition.

IMPORTS AND AVERAGE DUTIABLE VALUE OF IMPORTS OF GALVANIZED  
WIRE FROM SELECTED COUNTRIES

<u>Year</u>	<u>United Kingdom</u>		<u>Belgium/Luxembourg</u>		<u>Germany</u>		<u>Japan</u>	
	Tons	\$/cwt	Tons	\$/cwt	Tons	\$/cwt	Tons	\$/cwt
1957	2,013	8.49	303	7.71	154	9.60	-	-
1958	2,449	8.87	253	6.48	464	7.97	277	6.54
1959	3,208	8.64	225	7.85	2,363	6.90	922	6.79
1960	2,990	8.83	604	7.26	2,138	7.49	543	7.20
1961	3,375	9.85	982	6.13	1,294	7.61	761	6.98
1962	2,278	10.15	1,912	7.02	977	7.74	965	7.26
1963	2,009	10.03	2,663	7.05	1,816	7.68	1,550	8.01
1964(a)	2,000	10.05	1,000	7.19	1,000	9.51	3,000	6.82

(a) Estimated on basis of 9 months figures

Source: D.B.S. Trade of Canada

At the time of the public hearing, the published prices of 9, 12 and 16 gauge Canadian galvanized wire suitable for fencing were \$9.30, \$9.55 and \$10.90 per hundred pounds respectively, although selective discounts from these prices were reported. The lowest European prices of galvanized wire were reported to be in the range \$Can. 5.30 to \$Can. 5.55 per hundred pounds in Europe; the highest European prices were reported to be in the range \$Can. 6.20 to \$Can. 6.50, though these quotations are well below the average value of imports from Europe. Even after allowing for costs of transport and duties where applicable, such prices would be well below the published prices of Canadian wire. At about the same time, the wholesale price in Tokyo of 8 gauge galvanized wire was reported to be \$Can. 6.72, and for 14 gauge wire to be \$Can. 7.40.<sup>(1)</sup> A spokesman for a Vancouver firm manufacturing stucco reinforcing mesh, B.R.C. Weldmesh (1960) Limited, reported at the public hearing that the lowest price at which his company had been offered Canadian galvanized wire was \$50 per ton higher than the cost at their plant of imported wire.

<sup>(1)</sup> Japan Metal Daily, Tokyo, October 26, 1963

As noted previously imports entered through west coast ports, mostly dutiable, accounted for nearly half the total volume of imports. On the other hand, the remaining imports which were entered into Eastern Canada were mainly for fencing and, therefore, duty free. This would suggest that the Canadian producers of galvanized wire have been supplying the market in Eastern Canada except where buyers can take advantage of duty-free entry.

As in the case of wire rod, complaints were made by unintegrated fencing manufacturers that the two principal producers of galvanized wire, who were also producers of fencing made from galvanized wire, were putting a price squeeze on the independents. On the other hand, the two integrated producers argued that, where a price squeeze did exist, the cause was competition from imports of the finished products.

The Board compared the prices of various kinds of galvanized wire in Canada with prices of certain kinds of fencing into which the wire is made. Great variations in the margins were found to exist and in some cases the price of the wire was higher than the price of the fence. The following are examples of margins which were found:

	Selling price of Canadian Galv. wire (\$/100 lbs.)	Selling price of product (\$/100 lbs.)
13 gauge galv. barbed wire	9.75	8.36
9 $\frac{3}{4}$ gauge galv. farm fence	9.35(a)	9.95
9 gauge galv. chain link fabric	9.30	14.52
11 gauge galv. chain link fabric	9.45	8.80
13 gauge galv. chain link fabric	9.75	9.45
16 gauge galv. electric weld fabric, galv. for stucco work	10.90	15.93

(a) A discount from this price was reported; the amount is confidential.

In addition, the wire rope manufacturers complained that a steel producer was selling galvanized strand at the same price as the galvanized wire out of which it was made.

Each of these instances of inverted price relationship apparently had its own background. In the case of barbed wire, as will be shown in a subsequent section, imports supply over half the market, and prices have been pushed very low. The two integrated producers have attempted to meet this competition by lowering their barbed wire prices, but have not offered correspondingly low prices for the galvanized wire out of which the product is made. There are at least two independent producers who are equipped to produce barbed wire, and did so when the market was attractive. One of these, Sivaco, was represented at the public hearing and was critical of the fact that the two steel producers were selling barbed wire at a price lower than they were asking for the wire from which it was made. A spokesman for Sivaco stated:



"Due to this price structure we, as a non-integrated mill, had to discontinue the production of barbed wire."(1)

With regard to the lighter gauges of chain link fabric, the materials out of which it is made have been imported in considerable volume. One independent manufacturer, General Wire and Cable, has its own galvanizing facilities, so it can import Thomas quality wire rod duty free under tariff item 379d, for use in the manufacture of galvanized wire for chain link or other fencing. Others can and do import Thomas quality galvanized wire for fencing duty free under tariff item 402d. It appears to be the availability of relatively low cost materials from Europe which has made it possible for independent manufacturers to offer the lighter gauges of chain link fence at the relatively low prevailing prices. The Board did not, however, attempt to determine whether it had been the independents or the two steel producers who had initiated the price reductions. The net result at the time of the public hearing was that the two steel producers were indeed selling the lighter gauges of chain link fabric at lower prices than they were offering to sell the galvanized wire out of which it is made.

While the prices of farm fencing are higher than the price of the galvanized wire from which it is made, Lundy Fence complained that the gap had narrowed. The spokesman for the company said that the cost of buying Canadian wire was equivalent to about 80 per cent of the selling value of farm fence. He complained that the integrated producers had reduced the end-product prices without making as large reductions in wire prices.

A spokesman for Dosco agreed that prices of farm fence were low, but suggested that the problem stemmed from import competition.

The spokesman for Lundy Fence then referred to changes in selling practices which the two integrated producers had introduced and which had created difficulties for Lundy in Ontario. He said:

"...there is also the question, apart from list prices, of the methods of selling which are not restricted in any way to western Canada; ....the changed sales policies...in this case, were certainly not initiated by Lundy and haven't been brought in by Lundy, of channelling fence distribution through so-called jobbers rather than the dealers with, in many cases, the jobbers merely being former dealers being renamed and being given a new pricing basis."(2)

The spokesman for Dosco replied:

"...as producers we feel we are free to determine our own pattern of distribution, and that is what we have done."(3)

(1) Transcript, November 5, 1963, p. 359

(2) Same, November 6, 1963, p. 522-3

(3) Same, November 6, 1963, p. 523



Proposals and Representations - Dosco and Stelco each proposed the deletion of tariff items 401(d), 401(e), 402c and 402d, and the creation of the following item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, round, coated with zinc or spelter, n.o.p. ....	12½ p.c.	17½ p.c.

The proposed rates would be 2½ percentage points higher than the rates on uncoated wire proposed by the two steel companies. The proposal would mean increases in duties on galvanized wire with the exception that the most-favoured-nation rates under tariff item 401(e) would be reduced from 20 p.c. to 17½ p.c.

In 1963 about half the imports of galvanized wire were entered under tariff item 402d which provides duty-free entry; about 40 per cent of imports were entered under tariff item 401(e) at rates of 10 p.c., B.P. and 20 p.c., M.F.N.; the remainder were entered under tariff item 401(d) at rates of Free, B.P. and 10 p.c., M.F.N.

The position taken by the two principal producers of galvanized wire was that there was no justification for the special tariff treatment accorded galvanized wire for fencing. They pointed out that a large proportion of fencing was used for purposes other than on farms. Even so-called farm fencing was used extensively along highways and for other uses as well.

After describing the nature of the galvanizing operation, the spokesman for Stelco stated in support of his company's proposals:

"It will be recognized, therefore, that the galvanizing of wire requires a further operation beyond the drawing of the rods to wire, necessitating additional capital investment, also providing additional employment opportunities with resulting higher labour cost content. All this, it is submitted, justifies the suggested progression of tariff rates to which we earlier referred." (1)

The degree to which galvanizing enhances the value of wire has been dealt with above.

With regard to his company's proposal to delete tariff item 402d, the spokesman for Stelco pointed out that the facilities for manufacturing wire for fencing were no less of an investment than when for other end uses. The spokesman for Dosco commented that the entire schedule of duties on galvanized wire was anomalous and discriminatory, and he urged that discrimination based on size or end use be abolished. Each of the two integrated producers also suggested that a logical expansion project for a non-integrated producer of wire would be to set up galvanizing facilities.

(1) Transcript, November 4, 1963, p. 26

Webster and Horsfall proposed a broadening of the size provisions in tariff item 40ld, and they proposed that, with regard to tariff item 40l(e), the British preferential and most-favoured-nation rates each be reduced by five percentage points.

Of the independent fence producers, Lundy Fence Company Limited proposed that tariff items 402c and 402d be replaced by the following:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire of iron or steel, coated with zinc or aluminum, when imported by manufacturers of wire fencing for use in the manufacture of wire fencing	Free	Free

The principal change resulting from the implementation of this proposal would be to permit the entry free of duty of aluminum-coated wire for the manufacture of fence. Aluminum-coated wire is not made in Canada although it is competitive in use with galvanized wire. It is now classified under 40l(f) at 15 p.c., B.P. and 25 p.c., M.F.N.; this item is discussed in the following section.

Lundy Fence was strongly opposed to the imposition of duties on galvanized wire for fencing. Their spokesman contended that with present relationships between the prices of Canadian galvanized wire and fencing, his company could not stay in business if it used only Canadian galvanized wire. He also recalled the circumstances under which item 402d had been introduced:

"In the years immediately preceding World War II wire for manufacturing into fence was in free supply. During the war years wire was of course in very short supply and its distribution controlled. In the immediate post-war years wire continued in very short supply. Following the discontinuance of the Government-directed allocation of supplies, we were unable to obtain anything approaching our share of supplies available, based on our previous domestic purchases.

"It was at this time that tariff item 402d was introduced. Had it not been for the benefit we had had from item 402d, we would have been costed out of the market."(1)

At another point, he said:

"...from our point of view we are not asking for a protection against imports of fence so much as we are asking for manoeuvring room to act as a competitive manufacturer to the integrated producers..."(2)

(1) Transcript, November 6, 1963, p. 504-5

(2) Same, November 6, 1963, p. 531



Sivaco, although a user of galvanized wire for fencing and other products, and highly critical of the pricing policies of the two steel producers, did not propose any change in the duties thereof, nor did they oppose the proposals of the two integrated steel producers. Their spokesman stated:

"...although our company is importing various secondary wire products such as galvanized wire, barbed wire, etc., we could not object to Tariff Revisions the Board would find necessary to recommend, in order to protect products which are produced by the secondary processing industry. In the event the Primary Iron and Steel Industry is acting also as a secondary producer they are entitled in our opinion to protection on these products."<sup>(1)</sup>

Of the western producers of mesh and other products made from galvanized wire, B.R.C. Weldmesh and Irving Wire Products Limited both proposed lower duties under tariff item 401(e); the former specified rates of Free, B.P. and 10 p.c., M.F.N.

B.R.C. Weldmesh (1960) Limited of Vancouver contended that the increased duties on galvanized wire which the steel producers had proposed would not make them competitive on the west coast, but would simply add to the costs of a west coast manufacturer of galvanized wire products.

The Canadian Importers Association made proposals which would leave the principal end-use items (tariff items 401(d) and 402d) unchanged but would make other galvanized wire (tariff item 401(e)) dutiable along with uncoated wire under tariff item 401(g) at proposed rates of 10 p.c., B.P. and 15 p.c., M.F.N. They also proposed the deletion of tariff item 402c. The net effect of their proposals would be a reduction of five percentage points in the M.F.N. rate on galvanized wire now entered under tariff item 401(e).

Wirth Limited made proposals which were similar in effect to those of the Canadian Importers Association, except that Wirth proposed rates of 7½ p.c., B.P. and 15 p.c., M.F.N. under tariff item 401(g). Accordingly, the B.P. rate on goods now classified under tariff item 401(e) would be reduced by 2½ percentage points and the M.F.N. rate would be reduced by five percentage points.

Proposals made by the Institute of Iron and Steel Manufacturers, Great Britain, would have the effect of making galvanized wire duty-free under the B.P. Tariff.

#### Round Wire with Coatings Other than Zinc

	<u>B.P.</u>	<u>M.F.N.</u>
401 Wire, of iron or steel:-		
.....		
(f) Single or several, coated, n.o.p. or covered with any material, including cable so covered.....	15 p.c.	30 p.c.
GATT.....		25 p.c.



Tariff item 401(f) encompasses wire of iron or steel with coatings other than zinc; coatings of aluminum, tin, brass, copper, plastics and other materials are included. Production, shipments and imports are recorded as follows in recent years:

PRODUCTION, SHIPMENTS AND IMPORTS OF  
WIRE WITH COATINGS OTHER THAN ZINC

<u>Year</u>	<u>Production(a)</u>	<u>Shipments(a)</u>		<u>Imports</u>	
	<u>Tons</u>	<u>Tons</u>	<u>\$'000</u>	<u>Tons</u>	<u>\$'000</u>
1952	4,311	2,943	600	580	315
1953	2,101	1,637	424	595	310
1954	1,666	1,567	452	355	195
1955	1,930	1,936	577	520	315
1956	2,121	2,154	674	575	381
1957	1,730	1,958	614	568	400
1958	2,397	2,148	642	754	444
1959	4,450	4,336	1,279	559	364
1960	4,606	4,236	1,335	550	332
1961	4,722	4,044	1,275	690	478
1962	5,374	4,422	1,445	665	511
1963	5,872	4,707	1,538	898	574
1964	6,857	5,216	..	1,166(b)	656(b)

(a) Statistics of production and shipments are known to be incomplete and to understate actual production and shipments by considerable margins

(b) Estimated on the basis of nine months data

Source: D.B.S. Catalogue numbers 41-006, 41-216, Trade of Canada

A spokesman for Dosco told the Board that shipments by Canadian mills consisted almost entirely of coppered or tinned single wire, and he said that the same applied largely to imports. The largest single item of Canadian production is undoubtedly single strand bronze-plated high carbon steel wire used as bead wire in rubber tires. A spokesman for the Rubber Association of Canada reported that there were two producers of bead wire, one of whom, National-Standard Company of Canada Limited, supplies over 90 per cent of the requirements of the tire industry. In 1962, domestic purchases of tire bead wire by the rubber industry amounted to 4,565 tons valued at \$1,815,000.

In addition, the Board's attention was directed to certain kinds of wire for reinforcing rubber hose, aluminized steel wire and coated stainless steel wire, all of which are classified under tariff item 401(f). Aluminized wire is not made in Canada.

Stelco proposed the deletion of tariff item 401(f). Products now falling under it would then be classified under the following proposed items:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, n.o.p.	15 p.c.	20 p.c.

Thus, a reduction of five percentage points in the most-favoured-nation rate was contemplated.

Dosco proposed that tariff item 401(f) be amended by deleting the words "single or" from it. Single wire now falling under it would then come under the following proposed items:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, n.o.p.	15 p.c.	20 p.c.

The company explained that it was only interested in tinned and coppered wire in single form.

The Rubber Association proposed the creation of a tariff item to be worded as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire of all metals and kinds for use in the manufacture of rubber products	10 p.c.	15 p.c.

The spokesman for the Association expressed the view that the duties on bead wire were too high in relation to the duties on tires, which are dutiable at 20 p.c., B.P. and 22½ p.c., M.F.N. Moreover, he indicated that the Canadian producers of bead wire had not generally taken advantage of the duty on imports from the United States. Bead wire had been priced at \$U.S. 19.75 at Niles, Michigan, and at \$Can. 19.75 at Guelph. However, European competition had brought about a reduction of the price in the United States in August, 1963, to \$U.S. 17.75 but there had been no reduction in the Canadian price.

The spokesman for National-Standard opposed the proposal of the Rubber Association. However, he pointed out that he was not opposing the proposals of the steel companies which would mean rates of B.P., 15 p.c. and M.F.N., 20 p.c. on bead wire. He presented data showing that because of freight and exchange but not including duty it was still cheaper for Canadian tire producers to obtain their bead wire in Canada than in the United States even after the price reduction in that country. He contended, however, that a duty was required in order to protect Canadian producers of bead wire from Belgian competition.

A spokesman for the Canadian Electrical Manufacturers Association opposed the wording of the proposal by the Rubber Association on the grounds that the words "rubber products" would encompass rubber-covered electrical wire and cable. He proposed that tariff item



401(f) be left unchanged.

Lundy Fence expressed an interest in aluminized wire which is classified under tariff item 401(f); such wire is sometimes used instead of galvanized wire in fencing. The company proposed that aluminized wire for fencing be treated the same as galvanized wire for fencing in an item to be worded as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire of iron or steel, coated with zinc or aluminum, when imported by manufacturers of wire fencing for use in the manufacture of wire fencing	Free	Free

Vanadium-Alloys Steel Canada Limited sought special provision in the Tariff for stainless steel wire for use by the cold heading industry; most imports of such wire have been classified as coated and entered under tariff item 401(f). According to information supplied by the spokesman for the company, cold heading wire is lightly coated with various lubricating agents, depending upon the analysis of the wire. The coating may be of copper, soap, or an oxalate material. The coating is intended merely to keep the wire from coming into contact with the cold heading dies, and it is removed in the process of cold heading. Moreover, whereas the value of the bare wire is in excess of one dollar per pound, the value of the coating is only from two to three cents per pound of wire. The company proposed the creation of an item to be worded as follows:

"Coated stainless steel wire for use in the cold heading industry."

The company proposed that the rates of duty imposed not be higher than 15 p.c. No opposition to the proposal was expressed.

The manufacturers of mechanical springs reported a similar problem with respect to the importation of stainless steel wire for drawing and eventual use in mechanical springs. They proposed that tariff item 401(f) be changed to exclude wire which is coated merely for purposes of lubrication. Under their proposals for changes in tariff item 401(g), such wire would then become dutiable at 10 p.c., B.P. and 15 p.c., M.F.N.

Air Reduction Canada Limited proposed that no change be made in tariff item 401(f). Certain welding electrodes are classified under this item.

The Institute of Iron and Steel Wire Manufacturers, Great Britain, made proposals which would have the effect of making wire now encompassed by tariff item 401(f) duty-free under the British Preferential Tariff and dutiable under the Most-Favoured-Nation Tariff at 10 p.c. or 12½ p.c. depending upon shape.



Wire other than Round

Wire other than round is provided for principally under tariff items 401(c), 403(b) and 403(e).

CANADIAN PRODUCTION, SHIPMENTS AND IMPORTS  
OF WIRE OTHER THAN ROUND

		<u>1951</u>	<u>1956</u>	<u>1961</u>	<u>1964</u>
Production	(tons)(a)	3,707	2,090	3,949	5,106
Shipments	(tons)(a)	1,821	1,322	2,703	3,371
	(\$'000)	478	432	1,001	..
Imports:					
Tariff item 401(c)	(tons)	625	404	484	784 <sup>(b)</sup>
	(\$'000)	230	144	312	646 <sup>(b)</sup>
Tariff item 403(b)	(tons)	148	161	90	..
	(\$'000)	101	143	86	..
Tariff item 403(e)	(tons)	17	10	..	..
	(\$'000)	13	11	..	..
Total Imports	(tons)	790	575	574	784 <sup>(b)</sup>
	(\$'000)	344	298	398	646 <sup>(b)</sup>

(a) Flat, maximum .05 square inch cross section area and maximum .50 inch wide, and all other shapes, in all finishes and coatings.

(b) Estimated on the basis of nine months data.

Source: D.B.S. Catalogue Numbers 41-006, 41-216 and Trade of Canada.

Relatively small amounts of shaped wire are also entered under other tariff items, including tariff item 401(g).

A spokesman for Dosco estimated that about 95 per cent of the domestic shipments of wire in shapes other than round consisted of flat wire.

Flat wire is produced by cold rolling round wire, so that it is among the more highly processed kinds of wire. The average value of shipments in 1961 amounted to nearly \$400 per ton compared with \$186 per ton in the case of uncoated round wire.

Tariff Item 410(c) -

	<u>B.P.</u>	<u>M.F.N.</u>
401 Wire, of iron or steel:-		
.....		
(c) Drawn flat or cold rolled flat after drawing, coated or not, n.o.p., not more than .25 inch in width and less than .1875 inch in thickness.....	7½ p.c.	20 p.c.

Both Dosco and Stelco proposed the deletion of tariff item 401(c). Under their proposals, products now falling under that item would become dutiable under the following proposed item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, n.o.p.	15 p.c.	20 p.c.

Thus, an increase in the B.P. Tariff from 7½ p.c. to 15 p.c. was contemplated in the proposals.

Webster and Horsfall (Canada) Limited proposed the following wording and rates for tariff item 401(c):

	<u>B.P.</u>	<u>M.F.N.</u>
Drawn flat or cold rolled flat after drawing, coated with metallic coat or not, n.o.p., not more than .750 inches in width nor more than .250 in- ches in thickness, and in the galvanized drawn, annealed or pre-tempered condition	2½ p.c.	15 p.c.

The spokesman for Webster and Horsfall (Canada) Limited made the following comments on his proposal:

"The size limits are too restrictive, and do not cover the range of 'flat' wire normally considered to be the product of a wire mill and spring manufacturing material. A more modern, practical, limit for cold rolled flat wire is given in our proposal, which is motivated by our knowledge of demand in the wire products industry, and in particular, spring manufacture."(1)

(1) Transcript, November 7, 1963, p. 688

The manufacturers of mechanical springs proposed that tariff item 401(c) be deleted. Products now falling under that item would then become dutiable under the following consolidated item which they proposed:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, uncoated or coated with a lubricant to facilitate drawing only	10 p.c.	15 p.c.

Alternatively, they proposed that, if tariff item 401(c) were to be retained, it be amended so as not to include hard rolled or tempered spring wire for use in the manufacture of mechanical springs. The spokesman for the manufacturers contended that there was no justification for treating round wire differently from wire in other shapes.

The Institute of Iron and Steel Wire Manufacturers, Great Britain, made a proposal which would have the effect of making all flat wire duty-free under the British Preferential Tariff and dutiable at 12½ p.c. under the Most-Favoured-Nation Tariff.

Tariff Item 403(b) -

	<u>B.P.</u>	<u>M.F.N.</u>
403 Wire, of steel:-		
.....		
(b) Flat or woven flat, including steel strip, in the coil, coated or not, .064 inch in thickness or thinner, with tolerance not to exceed .002 inch, when imported by manufacturers of corset clasps, steels, wires and dress stays for use exclusively in the manufacture of corset clasps, steels, wires and dress stays, in their own factories.....	Free	5 p.c.

This tariff item encompasses certain materials imported by St. Lawrence Steel and Wire Company Limited of Gananoque, Ontario. The products imported under the item include black steel, galvanized steel, plastic covered steel and a woven steel product known as Spiroflex. The company reported that it imported these products in a total of over 50 sizes and that, due to the small markets for each, they were not made in Canada.



Stelco made no proposals respecting the item, but Dosco proposed that the item be deleted. Under Dosco's proposals, the goods now classified under tariff item 403(b) would become dutiable under the following proposed item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, n.o.p.	15 p.c.	20 p.c.

St. Lawrence Steel and Wire proposed that there be no increase in rates under tariff item 403(b) and that the word "dress" in both places where it appears in the item be changed to "apparel". The spokesman for the company pointed out that the steels imported by the company are used in the manufacture of products used in apparel other than dresses and corsets.

Speaking in support of the existing rates under tariff item 403(b), the spokesman for St. Lawrence said that in the past five years the company had met with serious import competition, mainly from the United Kingdom, which had had a serious effect on the profit position of the company. The products made by the company from materials imported under tariff item 403(b) are classified principally under tariff item 451c with a British Preferential rate of 15 p.c. and a most-favoured-nation rate of  $27\frac{1}{2}$  p.c. Tariff item 451c is not within the scope of the present Reference.

Tariff Item 403(e) -

	<u>B.P.</u>	<u>M.F.N.</u>
403 Wire, of steel:-		
...		
(e) Steel wire, coated or not, when imported by manufac- turers of machine card clothing for use exclusively in the manufacture of machine card clothing, in their own factories.....	Free	Free

The wire encompassed by this tariff item is imported by the J.C. McLaren Belting Company Limited, of Montreal, a manufacturer of machine card clothing. A card is a machine used in the manufacture of yarn. Card clothing consists of a foundation material, usually of textile fabric, through which are pressed many fine wires. The company provided the following information in a brief which they submitted:

- "1.) We are the sole manufacturers of machine card clothing in Canada and therefore this tariff item is, at present, being used exclusively by us.

- 2.) This type of wire is made of special hardened and tempered steel, a portion of which is round in shape and the balance is convex or double convex. It is not manufactured in Canada, and it is very unlikely that it would be in the future, because of the limited market. The Canadian wire manufacturers, therefore, would not be affected by the retention of this tariff item.
- 3.) Our machine card clothing is sold to the Canadian Textile industry and we are presently experiencing very stiff price competition from England and the United States. Any increase in the rate of duty on this wire would make it impractical for us to continue manufacturing machine card clothing in Canada."<sup>(1)</sup>

Stelco made no proposals respecting this item. Dosco proposed that the item be deleted and the products now falling under it be classified under the following items:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire, of iron or steel, n.o.p.	15 p.c.	20 p.c.

### Steel Wire Rope and Strand

Wire strand consists of a number of wires twisted together, usually around a central wire. One widely used construction consists of six wires twisted around a seventh one. Wire rope - or cable - consists of a number of strands twisted together; the strands are usually twisted around a central core of fibrous material, nylon or wire.

The manufacture of strand and rope for a wide variety of uses involves many technical complexities. The quality of wire, the choice of sizes to be used, the number and arrangement of wires in the strand and the number and arrangement of strands in the rope all vary according to the use for which the end product is intended. The basic processes of manufacture are, however, relatively simple. Roping wire is usually purchased in coils, and it must be transferred to bobbins of a size to fit the stranding machine on which it is to be used. The filled bobbins are loaded on a stranding machine to produce strand. The strands are then loaded on a closing or finishing machine to make the rope. A rope factory is normally equipped with stranding and closing machines in a variety of sizes. Light ropes can be made most economically on light machines, whereas very large machines are required for the production of heavy ropes.

Wire ropes are used throughout industry. In Canada the mining and logging industries are particularly heavy users. The construction industry provides one of the major markets for wire rope; it is used in construction equipment such as power shovels, and it is used as a material in bridges, elevators, highways and railways. The fishing industry in Canada uses large quantities of wire rope for trawling equipment and other purposes. Wire rope is also used extensively in shipping although this is not a particularly large market in Canada.

#### CANADIAN FACTORY SHIPMENTS OF WIRE ROPE AND STRAND

		<u>1955</u>	<u>1960</u>	<u>1963</u>	<u>1964</u>
Steel wire rope or	(tons)	23,658	25,746	27,079	29,062
cable	(\$'000)	14,599	17,423	17,980(a)	19,279(a)
Twisted strand wire	(tons)	8,018	9,517	11,276	16,944
(including galvanized	(\$'000)	2,684	3,427	3,833(a)	5,759(a)
guy wire, wire clothes					
lines, twisted bed					
strand)					

(a) Estimated

Source: D.B.S. Catalogue numbers 41-006 and 41-216



The principal use of strand is in the manufacture of wire rope but, as the table preceding indicates, there is also a market for strand as such. Guy wire is a form of strand which is used principally to support communications and power line poles. Messenger wire is a form of strand which is used to support communication cables of heavy weight and low tensile strength. Strand is used for concrete reinforcement, clotheslines and many other purposes.

The Producers - There is a clearly defined wire rope industry consisting of the following concerns:

Wire Rope Industries of Canada Limited:

Anglo-Canadian Wire Rope Company Limited	Montreal, P.Q.
British Ropes Canadian Factory (1963) Ltd.	Vancouver, B.C.
Canada Wire Ropes Ltd.	Smiths Falls, Ont.
Dominion Wire Rope Ltd.	Montreal, P.Q.

<u>Donald Ropes and Wire Cloth Ltd.</u>	Hamilton, Ont.
---	----------------

<u>Greening Wire Rope and Cable Company</u> <u>Division of Greening Industries Ltd.</u>	Midland, Ont.
--	---------------

<u>Wright's Canadian Ropes Ltd.</u>	Vancouver, B.C.
-------------------------------------	-----------------

Business groups in Great Britain have for many years had substantial interests in the wire rope industry in Canada, and within the last few years the entire Canadian industry has come under the control of British and German interests. The industry employs about 900 persons directly.

The wire rope industry accounts for virtually all Canadian factory shipments of wire rope, but for less than half those of strand. Stelco is a large producer of strand for guy wire, concrete reinforcement and other purposes, and there are other producers as well.

Tariff Treatment - The tariff items which provide for wire rope consist of one general item, two items pertaining to commercial fishing and three other end use items. They are as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
401 Wire, of iron or steel:-		
(b) Twisted, braided or stranded, including wire rope or cable, coated or not, n.o.p. ....	15 p.c.	25 p.c.
403 Wire, of steel:-		
(f) Wire, of rust or acid resisting steel, twisted or stranded, for use exclusively in commercial fishing operations .....	Free	10 p.c.
...		
(g) Wire rope or cable, coated or not, for use exclusively in commercial fishing operations .....	Free	10 p.c.

B.P.M.F.N.

411a	Machinery, logging cars, cranes, blocks and tackle, wire rope, but not including wire rope to be used for guy ropes or in breaking logs going down grade, and complete parts of all the foregoing, for use exclusively in the operation of logging, such operation to include the removal of the log from stump to skidway, log dump, or common or other carrier .....	10 p.c.	12 $\frac{1}{2}$ p.c.
440e	Wire rope for use exclusively for rigging of ships and vessels, under regulations prescribed by the Minister .....	Free	Free
491	Machinery and apparatus for use in exploratory or discovery work in connection with oil or natural gas wells or for the development, maintenance, testing, depletion, or production of such wells up to and including the wellhead assembly or surface oil pumping unit; well-drilling machinery and apparatus for use in the exploration, discovery, development or operation of potash or rock salt deposits;... (1)...		
	Wire rope; ...	5 p.c.	10 p.c.

### The Market

Statistics of the Canadian market for wire rope and strand are contained in the table on the following page. Canadian factory shipments of wire rope increased in volume each of the years 1962 to 1964, inclusive, but at the end of the period had not quite regained the peak level reached in 1956. Shipments of strand, however, were considerably higher in 1964 than in 1956. Imports as a percentage of the total value of the market for rope and strand together have been somewhat higher since 1961 than in earlier years; on the other hand, imports have increased a little less rapidly than Canadian shipments since 1961. In 1964 imports of strand only accounted for about five per cent of the market by volume, but imports of rope accounted for about a quarter of the market for rope.

Of the imports of strand in 1963, about half by value came from the United States and were relatively high in unit value, suggesting some special type. Clearly, Canadian manufacturers supply most of the market.

Imports of wire rope, on the other hand, while not particularly large by most standards, appear to have had an appreciable effect on the Canadian market. With a lack of growth in total demand, the

THE CANADIAN MARKET FOR WIRE ROPE AND STRAND, SELECTED YEARS

	1950	1956	1959	1960	1961	1962	1963	1964
<u>Canadian Factory Shipments</u>								
Steel wire rope or cable								
tons	17,677	30,006	26,109	25,746	23,459	26,518	27,079	29,062
\$000	10,150	18,538	17,841	17,423	15,783	17,608	17,980(a)	19,297(a)
Twisted strand wire (including galvanized guy wire, wire clotheslines, twisted bed strand)								
tons	6,848	10,582	8,511	9,517	7,773	9,267	11,276	16,944
\$000	1,782	3,953	3,085	3,427	2,989	3,150	3,833(a)	5,759(a)
Total								
tons	24,525	40,588	34,620	35,263	31,232	35,785	38,355	46,006
\$000	11,932	22,491	20,926	20,850	18,772	20,758	21,813(a)	25,056(a)
<u>Imports</u>								
Rope								
tons	..	..	..	..	..	..	6,851	9,342(a)
\$000	..	..	..	..	..	..	2,887	3,690(a)
Strand								
tons	..	..	..	..	..	..	701	974(a)
\$000	..	..	..	..	..	..	510	489(a)
Total(b)								
tons	..	..	..	..	..	9,511	7,552	10,316
\$000	982	2,580	3,124	2,964	3,345	3,707	3,397	4,179
<u>Exports</u>								
Wire rope, twisted wire and multiple strand wire								
tons	..	..	..	..	..	500(a)	922	684
\$000	84	408	358	229	235	256	473	314
<u>Domestic Disappearance</u>								
tons	..	..	..	..	..	44,796	44,985(a)	55,638(a)
\$000	12,830	24,663	23,692	23,585	21,882	24,209	24,737	28,921
Imports as % of domestic disappearance								
vol.	7.7	10.5	13.2	12.6	15.3	21.2	16.8	18.5
value						15.3	13.7	14.4

(a) Estimated  
(b) Excludes imports of wire rope for logging prior to 1959

Source: D.B.S. Catalogue numbers 41-006, 41-216 and Trade of Canada



imports have meant a loss of volume for the Canadian producers, and there were complaints that they had exerted a downward pressure on prices at a time when profits were at a very low level.

Imports of wire rope by tariff items and by countries of origin in 1963 are shown in the table on the following page. Of total imports valued at \$2,886,000, those entered under end use items for fishing, logging and oilfield work amounted to \$1,297,000. Imports under tariff item 440e for rigging ships are known to have been small. The balance of imports valued at \$1.6 million were entered under tariff item 401(b), which is of more general application.

The United Kingdom is the largest single source of imports of wire rope. One firm, Martin Black (Canada) Limited, accounts for a substantial share of sales in Canada of wire rope imported from the United Kingdom. Beginning in the mid-1950's, the firm established warehouses and agencies in Canada. At the public hearing a spokesman for the firm indicated it had developed in Canada a business widely diversified both in terms of geography and in terms of industries serviced. He said sales were made for construction, shipping, ship-building, engineering, hydro-electric power facilities, earth moving equipment, elevators, logging, railways, commercial fishing, and other uses.

Imports of wire rope for commercial fishing are understood to be chiefly galvanized for use as trawl warps in east coast trawling. The British supply virtually all this market, which has been increasing in size.

Less is known of imports from other sources. However, judging from comments made at the public hearing and elsewhere, it would appear that imports from Europe consist in large part of standard types of wire rope which can be produced in large quantities. Rope for slusher hoists used in mines is one example which was cited.

Imports from Japan are entered mainly into British Columbia.

Judging from evidence at the public hearing, the principal attraction of imported rope to Canadian buyers is price. Martin Black (Canada) Limited reported that it was keeping its prices three to five per cent below those offered by Canadian manufacturers. The spokesman for the company did say, however, that price competition from Canadian manufacturers had intensified and that his company did not have much more leeway in prices in view of the anti-dumping regulations. He supported this contention by submitting financial statements which, as he said, showed that the company had not been doing well on its Canadian operations. In addition to the attraction of lower prices of British rope, it was contended that British quality, particularly in galvanized rope for fishing, was superior; this was denied by the Canadian rope manufacturers.

Lower prices also seem to have been the principal explanation of imports from Europe. A spokesman for the Canadian manufacturers indicated that European prices of standard rope, such as for slusher hoists, were much lower than Canadian prices.

# IMPORTS OF WIRE ROPE, BY TARIFF ITEMS AND BY COUNTRIES OF ORIGIN, 1963

Tariff Item		United Kingdom	West Germany	Japan	Nether- lands	United States	Other	Total
Wire Rope for Unenumerated Uses:								
401 Wire, of iron or steel:-								
(b) Twisted, braided or stranded, including wire rope or cable, coated or not, n.o.p. (s.c. 5929)	(tons) (\$'000)	1,312 726	461 182	98 27	472 173	502 316	400 165	3,245(a) 1,589(a)
Wire Rope for Enumerated Uses								
403 (g) Wire rope or cable, coated or not, for use exclusively in commercial fishing operations (s.c. 5927)	(tons) (\$'000)	1,334 578	7 2	14 6	57 20	2 8	32 17	1,446 631
411a Wire rope for logging (s.c. 5925)	(tons) (\$'000)	113 56	55 19	1,149 344	306 112	230 28	128 36	1,981 595
410e Wire rope twenty-one hundred feet and more in length, designed for use in drilling wells two thousand feet and more in depth, and four inches or more in diameter, and for use in raising and lowering casing more than four inches in diameter for such wells, for use exclusively in drilling for water, natural gas and oil and in prospecting for minerals (s.c. 5923)	(tons) (\$'000)	38 16	- -	103 29	- -	38 26	- -	179 71
Total Imports	(tons) (\$'000)	2,797 1,376	523 203	1,364 406	835 305	772 378	560 218	6,851 2,886

(a) Includes such imports of wire rope as are entered under tariff items 401(f) and 440e. In 1962, imports under tariff item 440e only amounted to seven tons  
 (b) This tariff item was deleted March 17, 1964

Source: Trade of Canada

## The Competitive Position of the Industry

The effective levels of protection enjoyed by the wire rope industry are high by most standards. Whereas roping wire, which is the principal element of cost in the manufacture of wire rope, can be imported duty-free under the B.P. Tariff and at only 5 p.c. under the M.F.N. Tariff, most wire rope is dutiable under tariff item 401(b) at 15 p.c., B.P. and 25 p.c., M.F.N. Taking into account the fact that the cost of roping wire is equivalent to half or more of the factory cost of the rope into which it is made, the effective level of protection on value added by the rope industry is double or more the rates under tariff item 401(b). Even the lower rates of 10 p.c., B.P. and 12½ p.c., M.F.N. under which wire rope for logging is entered provide substantial levels of effective protection. The rates of duty on rope for the fishing industry, the oilfields and shipping are lower.

However, the wire rope industry presented impressive evidence that it was not flourishing. In a market which has not been expanding, imports have accounted for up to a quarter of the volume of supply. Moreover, the profits of the wire rope industry have been low; in 1962 they reached a low point of 2.8 per cent of sales.

Taking into account the high levels of effective protection enjoyed by the industry, the sizeable imports and the low profits within the industry, it is clear that the costs of Canadian manufacturers are significantly higher than those abroad; the source, or sources, of the higher costs must lie either in the costs of raw materials, costs of manufacture or costs of distribution.

The principal raw material used by the industry is, of course, roping wire which, as noted above, accounts for half or more of the factory cost of the rope into which it is made. The conditions in the Canadian market for roping wire have been described at some length in a preceding section. The Board has found no evidence that raw materials constitute an important part of the apparent disabilities of the industry.

Coming now to manufacturing costs, a spokesman for the industry pointed out a number of competitive disabilities faced by the rope manufacturers in Canada. One factor which undoubtedly enhances manufacturing costs in Canada to some extent is that the industry has been operating well below its capacity. A spokesman for the industry pointed out that nearly as much wire rope had been produced in 1944 as the 25,000 or so tons which have been produced annually in recent years; in the interval, the industry had been considerably expanded and modernized to the point where it is capable of producing 50,000 tons annually on the basis of two working shifts.

Another problem pointed out by the spokesman for the industry was that of short runs. The most economical type of operation is one where a machine can be left for long periods in the production of one product. In such an operation, the refilling of the bobbins and other servicing functions become reduced to an efficient routine. In the absence of sufficient volume to permit such an operation, it is highly desirable that volume be at least large enough to permit the bobbins on a finishing machine to be completely filled, even though the machine



will have to be adjusted each time to produce a different kind of rope. The most costly type of operation is one calling for the setting up of a machine to produce an order too small to justify fully loaded bobbins. With regard to Canadian operations, the spokesman for the industry said:

"Our problem is that we have a run of one or two machine loads of one diameter and we have to switch to another diameter which entails a larger labour cost of changing the machines to the new construction in diameter of strand or roping.

"In the United States I know some plants where they have a battery of machines day in and day out doing nothing else but the same size and construction of rope. I understand some plants in the U.K., I know of some in particular where the same advantage applies. This advantage does not apply in Canada.

"It is a question of running the machine without having to change the settings." (1)

He estimated that Canadian manufacturers in Canada exhaust full bobbins on only about 50 to 55 per cent of their production.

On the other hand, the spokesman for the Wire Rope Conference, Great Britain, expressed doubt that the disadvantage of the Canadian manufacturers in this regard was very great. In this connection, it is noteworthy that he represented 33 British manufacturers who together produced 84,000 tons of wire rope in 1962. These figures would suggest that the average size of plant in Great Britain must be, if anything, smaller than that in Canada. This would not, however, necessarily preclude greater specialization of plants; the spokesman for the industry in Canada referred to the very large home market for certain types of rope which European manufacturers enjoyed.

Differences in labour costs were also cited as a disadvantage in manufacturing in Canada. Labour costs in Canada are equivalent to something of the order of a fifth of the selling price of wire rope, and it is well known that wage rates in Canada are well above those in Great Britain and other European countries.

Costs of distribution were cited as a major disadvantage faced by the Canadian manufacturers. Many customers have come to expect prompt delivery and very costly servicing by Canadian manufacturers. Highly qualified engineers are provided to make extensive studies of the particular requirements of customers and to provide this service without cost to the user and without assurances of receiving the subsequent orders. The industry bears the cost of a network of warehouses for stocking and cutting rope, and it has about 200 agents located across the country, the majority of whom hold rope on consignment. As one example of the heavy costs of inventory, mining companies have come to demand that spare hoist ropes be manufactured and held by the maker without charge until such time as they are needed.

---

(1) Transcript, November 7, 1963, p. 667-8

Canadian manufacturers are also expected to provide, without additional charge, the many short lengths of rope which customers often require; on many of these transactions they undoubtedly suffer actual losses.

Judging from evidence by industry representatives, suppliers from abroad appear to have taken advantage of these peculiarities of the Canadian market. With ample supplies of rope now available from abroad, Canadian customers with less specialized requirements have found they can obtain their needs more cheaply from agents of overseas suppliers, leaving the Canadian manufacturers with a disproportionate share of that part of the market which is costly to service. The spokesman for the industry contended that overseas suppliers had kept down their costs of distribution in Canada in the following ways:

"...

2. By not providing service to smaller communities and concentrating only on major market areas.
3. By not stocking the large variety of ropes required to meet the myriad requirements of industry, they can concentrate on large blocks of business and the few types of rope for which there is a large demand.
4. By not providing the technical and engineering service to industry that domestic manufacturers do.
5. By obtaining business at lower prices from consumers which the Canadian manufacturers have assisted in developing specifications incorporated in the tenders. This applies to governmental agencies and private industry alike.

"In summary, the importer participates disproportionately in the 'cream' of the market, with consequent lower distribution costs. The domestic manufacturer needs this type of business to offset his high distribution costs in other areas."<sup>(1)</sup>

For his part, the spokesman for the Wire Rope Export Conference asserted that the Canadian manufacturers enjoyed substantial advantages in competing for business in Canada, and he listed the following five factors in their favour:

1. Because of their long experience in Canada, Canadian manufacturers are "closer to the market at all levels."
2. The Canadian manufacturers can produce to order more quickly. In addition, they can hold some inventory in the form of roping wire rather than the more costly wire rope.
3. Canadian manufacturers benefit from a preference for Canadian-made products when other things are equal.

---

(1) Transcript, November 7, 1963, p. 628-9

He said this comment applied both to the various levels of government and to private industry.

4. "Reciprocity." He referred to inter-corporate connections which influenced some buyers to buy from Canadian suppliers.
5. The Canadian manufacturers are legally free to quote prices as low as competitive conditions and economics permit. In contrast, he contended that British suppliers are restricted in this regard by the anti-dumping regulations.

In summary, it appears that there are certain disadvantages in the manufacture of wire rope in Canada. Wage rates, and probably wage costs, which account for perhaps one-fifth of the selling value of wire rope, are considerably higher in Canada than in Europe. The Europeans enjoy an advantage in serving a larger market for certain standard types of wire rope. These are factors which are to a great extent beyond the control of the industry.

Of a different order, however, are the other sources of high costs which were cited. The large surplus of productive capacity and the costly pattern of servicing which have overtaken the industry are things which time, keen price competition, and possibly secular growth in demand can be counted upon to correct.

#### Proposals

The manufacturers of wire rope, in a joint submission, proposed that tariff item 401(b), providing for rope and strand, be left unchanged. In addition, they proposed that tariff items 403(f) and 403(g) be rewritten to exclude wire rope and strand. To all intents, the proposal would eliminate the two items pertaining to commercial fishing. At the public hearing, Dosco and Stelco supported the proposal that tariff item 401(b) be left unchanged.

Referring to their proposals, the spokesman for the wire rope industry said:

"It is our objective to prevent any further deterioration of the situation and, if possible, to strengthen the industry which is an important sector of secondary manufacturing in Canada."(1)

Webster and Horsfall (Canada) Limited proposed that tariff item 401(b) be left unchanged.

The Canadian Importers Association proposed that the rates under tariff item 401(b) be reduced to 10 p.c., B.P. and 20 p.c., M.F.N.

---

(1) Transcript, November 7, 1963, p. 620



The Council of the Forest Industries of British Columbia presented a brief in which the interest of the primary industries of the Province in obtaining wire rope at reasonable prices was emphasized. The Council proposed that no change be made in tariff items 403(c), 403(f) or 403(g). The Fisheries Council of Canada proposed the removal of the existing most-favoured-nation duties under these tariff items.

The Wire Rope Export Conference, Great Britain, proposed that tariff item 401(b) be replaced by the following:

	<u>B.P.</u>	<u>M.F.N.</u>
Stranded wire, cables, cordage, ropes, plaited bands, slings and the like of iron or steel wire, but excluding insulated electric cables:-		
(a) Twisted, braided or stranded, coated or not, n.o.p.	Free	10 p.c.
(b) Wire rope or cables, coated or not	10 p.c.	25 p.c.

The Conference proposed that tariff item 403(g) be left unchanged.

Thus, in addition to leaving tariff item 403(g) in the Tariff, this proposal differs from that of the wire rope industry in Canada in that it would provide lower rates of duty on strand and a reduction of five percentage points in the existing B.P. rate on wire rope. Speaking in support of the proposal, a spokesman for the Wire Rope Export Conference stated:

"As a result of the lower prices prevailing for this class of material, freight costs from the United Kingdom have a much heavier effect on the landed cost, and, with the rate of duty presently applicable, prevent British manufacturers from competing in this field."<sup>(1)</sup>

The Institute of Iron and Steel Wire Manufacturers, Great Britain, while not expressing an interest in wire rope, proposed in effect that products other than wire rope now classified under tariff item 401(b) be treated separately. They proposed that wire "twisted, braided or stranded, coated or not" be made dutiable at the reduced levels of Free, B.P. and 10 p.c., M.F.N.

<sup>(1)</sup> Transcript, November 7, 1963, p. 721

Wire FencingBarbed Wire Fencing

Barbed wire is dutiable under the following tariff item:

	<u>B.P.</u>	<u>M.F.N.</u>
401 Wire, of iron or steel:-		
(a) Barbed fencing, coated or not	Free	10 p.c.

The process of producing barbed wire is relatively simple, the cost of the galvanized wire accounting for well over half the total cost of production. Basically, two parallel wires are fed into a machine where the barbs, cut from a third wire running at right angles to the other two, are attached as the wires are stranded. Coiling completes the operation.

Barbed wire is used principally on farms although it does have certain other uses. For example, one or more strands of barbed wire are often run along the top of a chain link fence, and there are military uses for barbed wire.

At the time of the public hearing it was reported that Dosco, Stelco and General Wire and Cable were producing barbed wire. Sivaco had the necessary machinery but was finding market conditions so unattractive that it was not actually in production.

A spokesman for Dosco estimated Canadian capacity to produce barbed wire at 45,900 tons annually on a three shift basis; this represents three or four times the annual Canadian market. However, the same spokesman pointed out that the demand for barbed wire is highly seasonal and the cost of stocking it is high. Furthermore, barbed wire machinery is not particularly expensive; in these circumstances the cost of maintaining excess capacity is offset by savings in inventory costs.

Statistics of the market for barbed wire are contained in the table on the following page. Total consumption, while fluctuating from year to year, has tended to increase over the past fifteen years.

Imports rose rapidly after 1952, and in 1959 and 1960 they supplied over 70 per cent of the market by volume. While imports have been declining since the end of 1962, they have never, since the end of 1957, supplied less than half the market by volume. The imports have clearly been at the expense of domestic shipments, the latter having declined from 10,389 tons in 1951 to 2,971 tons in 1960; since that time, however, the Canadian producers have regained some ground, and shipments amounted to 6,001 tons in 1963 and 7,093 tons in 1964.

THE MARKET FOR BARBED WIRE

	<u>1951</u>	<u>1956</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Canadian Production	tons	10,644	6,671	4,649	3,755	2,916	4,244	5,740	6,935
Canadian Factory Shipments	tons	10,389	6,849	4,588	3,393	2,971	4,000	5,391	6,001
	\$'000	1,769	1,168	855	632	550	732	943	1,050(a)
Imports	tons	376	4,505	4,637	8,130	7,202	6,430	8,704	7,488(a)
	\$'000	89	605	706	1,092	1,036	948	1,211	1,013
Supply (Imports plus shipments)	tons	10,765	11,354	9,225	11,523	10,173	10,430	14,095	13,706
	\$'000	1,858	1,773	1,561	1,724	1,586	1,680	2,154	2,063
Imports as per cent of supply	Vol.	3.5	39.7	50.3	70.6	70.8	61.6	61.8	56.2
	Val.	4.8	34.1	45.2	63.3	65.3	56.4	56.2	49.1
									51.4
									44.4

(a) Estimated

Source: D.B.S. Catalogue Numbers 41-006, 41-216 and Trade of Canada



The following table shows imports of barbed wire fencing by principal countries of origin:

IMPORTS OF BARBED WIRE FENCING

		<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
United Kingdom	tons	1,681	2,286	1,930	386	386
	\$/ton	162	162	175	191	190
Austria	tons	455	1,137	1,148	990	572
	\$/ton	128	133	127	132	136
Belgium- Luxembourg	tons	859	599	544	1,749	1,181
	\$/ton	121	145	142	136	141
France	tons	96	-	193	595	133
	\$/ton	145	-	146	140	134
Germany W.	tons	1,756	602	442	974	1,040
	\$/ton	141	154	159	162	155
Netherlands	tons	170	104	139	861	155
	\$/ton	128	140	147	138	137
Japan	tons	3,084	2,445	2,021	3,129	4,227
	\$/ton	120	129	131	129	116
Other	tons	30	28	14	19	12
	\$/ton	175	172	265	227	327
Total	tons	8,130	7,202	6,430	8,704	7,705
	\$/ton	134	144	147	139	132

Source: Trade of Canada

The two principal sources of imports have been Japan and countries of the E.C.S.C. Virtually all the imports from Japan and some of those from elsewhere have been entered through ports in British Columbia. The proportion of total imports by volume entered through British Columbia was 43 per cent in 1961, 47 per cent in 1962 and 65 per cent in 1963.

Lower prices abroad appear to explain the high level of imports. As the above table shows, the average values for duty purposes of imports in 1963 varied from \$116 per ton from Japan to \$190 per ton from Great Britain and to a very high average value on the small imports from the United States. Imports from European countries were valued at from \$135 per ton, coming from Austria and France, to \$155 per ton from Germany.

The costs of duties, freight and other expenses of importation from countries entitled to most-favoured-nation treatment would add \$30 or \$35 to the cost of imports into eastern Canada, and \$35 or \$40 to the cost in the West. Thus, imports from European countries would appear to have been landing at between \$175 and \$195 per ton in 1963.

In comparison, Canadian heavy barbed wire was reported to be priced at about \$165 per ton and light barbed wire at about \$192 per ton, delivered at various points in eastern Canada. These Canadian prices reflect a reduction of price in 1963 which was made to meet import competition. It is difficult to make a precise comparison of these prices with those of the landed cost of imports because the qualities and sizes of barbed wire from different sources are by no means uniform. Moreover, the severely competitive conditions have led to changes in quality as well as price.

The spokesman for Stelco described these changes in some detail. Between 1949 and 1957 the company was offering 14 gauge barbed wire with four-point barbs spaced six inches apart, with a weight of 58 pounds per reel of 80 rods, and 12½ gauge barbed wire with four-point barbs spaced six inches apart with a weight of 88 pounds. In the 1950's the company analysed samples of imports with the following results:

"...between 1953 and 1957 we bought and analysed various samples of imported barbed wire originating in many different countries, and came to the conclusion that there were no continental standards either of weight or gauge. Many of the imports came in from Europe and England. Heavy barbed wire advertised as 12½ American standard wire gauge, again in 80 rod reels, weighed on the average 77, 80 or 83 pounds versus our 88 pounds per reel; and light barbed wire imports were recorded at 50 pounds, 52 pounds and 56 pounds compared with our standard 58 pounds."(1)

In 1957 the company changed its standards to two new sizes which it marketed as "heavy" and "light" barbed wire. The new "heavy" barbed wire was 13 gauge, four by six, at 75 pounds; the new "light" barbed wire was 14½ gauge, four by six, at 50 pounds.

Judging from the evidence at the public hearing, changes in sizes and weights of imported barbed wire became an important element in the competitive process, particularly after 1960. An importer stated:

"...starting in 1960 or 1961 some importers started using 'heavy' and 'light' and there was no weight indicated at that time - at least not for the first year or so - and then it started to drop, and then they started this weight-cutting in this business..."(2)

There have, in addition, been certain technological developments in Europe. Some producers have introduced barbed wire made from thinner wire of higher tensile strength, resulting in a considerable

(1) Transcript, November 4, 1963, p. 108-9

(2) Same, November 4, 1963, p. 109



saving in weight. Since a longer length of barbed wire is contained in a ton of this product, it commands a higher price per unit of weight. The imports from Great Britain and Germany at relatively high prices are believed to have consisted at least in part of the high tensile product. However, it does not seem to have gained a very large percentage of the Canadian market, and some doubts about its merits were expressed at the public hearing.

Judging from the statistics of production and imports, it would appear that the Canadian producers, after reducing their prices late in 1962, must have become competitive or nearly competitive with imports in the eastern part of the country. Moreover, while the average value per ton of imports showed no increase in the first nine months of 1964, European prices are reported to have begun rising. At the same time, to the extent that Canadian barbed wire has become competitive in the East, this result has been achieved by reductions in prices to levels which the Canadian producers have good reason to regard as unsatisfactory.

Spokesmen for both Dosco and Stelco expressed grave concern over the high levels of barbed wire imports. The spokesman for Stelco said:

"Our company has manufactured barbed wire continuously for more than 50 years. In all that time, we have never witnessed such an intensive onslaught of foreign producers as during the past few years. These foreign producers are apparently seeking to capture the entire Canadian market. Not only has there been no opportunity for price relief to meet the rising costs of the past ten years because of this severe import competition; in fact some prices have been reduced to save some vestige of the Canadian market for Canadians."

"At first, when introducing the reduced prices, it was thought that the Canadian producers had a chance to compete. Foreign producers, however, resorted to the device of using lighter gauges of wire and consequently lighter weights for the sake of quoting yet lower prices. This results in an inferior product, so that it is questionable whether Canadian users of barbed wire are obtaining as much value for their money as was the case some years ago."<sup>(1)</sup>

Proposals - Both Dosco and Stelco made proposals which, while slightly different in form would each have the effect of making barbed wire dutiable at 15 p.c., B.P. and 20 p.c., M.F.N. The Institute of Iron and Steel Wire Manufacturers, Great Britain, and Wirth Limited, both proposed that the duties on barbed wire be left unchanged at Free, B.P., and 10 p.c., M.F.N.

#### Other Wire Fencing

Wire fencing other than barbed wire is dutiable under the following tariff items:

<sup>(1)</sup> Transcript, November 4, 1963, p. 17 - 18



B.P.M.F.N.

402	Woven or welded wire fencing, of iron or steel, coated or not, from wire not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch; wire fencing, of iron or steel, coated or not, n.o.p.....	Free	12 $\frac{1}{2}$ p.c.
-----	---	------	-----------------------

Ex. 402a	Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.....	12 $\frac{1}{2}$ p.c.	20 p.c.
----------	---	-----------------------	---------

The principal kinds of fencing on the Canadian market are woven farm fencing, chain link fabric, and woven and welded lawn fencing. A large proportion of it is of wire within the size range 9 to 14 gauge, i.e., .144 inch to .080 inch inclusive, as specified in tariff item 402. The phrase "wire fencing, of iron or steel, coated or not, n.o.p." in tariff item 402 provides for fencing which is neither woven nor welded. For example, some lawn fencing is considered neither woven nor welded, and hinge joint farm fencing, which is neither woven nor welded, was formerly produced in large quantities but it is not now produced in Canada; it is doubtful that any is imported.

Tariff item Ex 402a encompasses woven or welded fencing of wire thicker than 9 gauge and thinner than 14 gauge. While the largest proportion of the fencing sold in Canada is within the range 9 to 14 gauge, there is a market for fencing of both thicker and thinner wire. For example, chain link fencing and farm fencing of wire as thick as 6 gauge is offered for sale. Light weight chain link fabric for residential use, and woven poultry fencing, are examples of fencing made of wire thinner than 14 gauge.

It is estimated that a little less than half the volume of fencing other than barbed wire sold in Canada is now used for agricultural purposes. Of the total consumption of "farm fencing", which has been between 13,000 and 15,000 tons annually valued at approximately \$3 million, an estimated 70 per cent is used on farms and the remainder for concrete reinforcement, on highway and railway rights of way and for other purposes. Chain link fabric and lawn fencing, consumption of which has been around 10,000 tons valued at about \$2 million, are used principally around industrial, institutional and residential establishments. Some years ago, hardly any chain link fencing was produced and nearly all farm fencing was for use on farms.

Lundy Fence offered the following description of how fencing is manufactured.

"Farm, hog and poultry fence are manufactured on machines known as fence-loom. The horizontal, or line, wires proceed through the machine. The vertical, or stay, wires are laid on the line wires at the prescribed spacing, wound around the top and bottom line wires, and fastened to the other line wires by wire ties. The weight of the wire used, the height of the fence,

and the line wire and stay wire spacing, vary according to the purpose for which the fence is to be used. Weather conditions dictate the use of galvanized wire. Gauges of wire used in this range of fence products are from 9 gauge (.144") to 17 gauge (.054"). This type of fence is used almost 100% for agricultural purposes".

....

"Single and double scroll ornamental lawn fence is also manufactured from galvanized wire. Crimped stay wires are fed across the machine and looped over to form a scroll top. These stay wires and the scroll top are held in position by double line wires which are twisted firmly in alternate directions between successive stay wires".

....

"To make chain link fabric two wires are forced through a die which forms them into completely interlocked semi-flattened spirals, one of which interlocks with the immediately preceding spiral and the other with the succeeding spiral. The stays are cut off at the prescribed length, and the ends of the wires are either barbed or knuckled. We make light weight chain link fabrics from wire ranging from 14 gauge (.080") up to 11 gauge (.116") and these fabrics are largely used for residential purposes. Heavier weight fabrics for industrial and institutional purposes are made from 9 gauge (.144") and 6 gauge (.192") wire. We make chain link fabric from electro-galvanized and commercial galvanized steel wire, and from aluminum wire."<sup>(1)</sup>

While the manufacture of farm, lawn and chain link fencing is more complex than that of barbed wire, the cost of the galvanized wire still accounts for more than half the total cost in most cases.

Fencing of one kind or another is manufactured in all parts of Canada, as shown in the table on the following page. It is noteworthy, however, that neither farm fencing nor lawn fencing is apparently manufactured west of Ontario.

The details of the Canadian market for fencing other than barbed wire are contained in the table on page 113. In the period since 1956, imports have never exceeded seven per cent by value of domestic disappearance; in 1964 they were equivalent in volume to about three per cent of domestic disappearance. Great Britain is the largest exporter of fencing to Canada, and about one third of total imports are entered into British Columbia. The bulkiness of fencing, with consequent high shipping costs, was cited as a deterrent to imports.

Since 1956 the market for fencing in Canada has tended to increase moderately, due mainly to a sharp rise in consumption of chain link fabric.

---

(1) Transcript, November 6, 1963, p. 501-2

CANADIAN MANUFACTURERS OF FENCING, 1963

<u>Company</u>	<u>Farm Fencing</u>	<u>Chain Link Fencing</u>	<u>Lawn Fencing</u>
A.I.M. Steel Ltd., Vancouver		X	
British Ropes Canadian Factory Ltd., Vancouver		X	
Dominion Steel and Coal Corp., Montreal	X	X	
Dominion Steel and Coal Corp., Tobicoke, Ont.	X	X	X
General Wire and Cable Ltd., Cobourg, Ont.		X	X
Gibb Manufacturing Co. Ltd., Port Credit, Ont.			X
Lundy Steel Products Ltd., Dunnville, Ont.	X	X	X
Manhattan Wire Works Ltd., Montreal, Que.			X
New Brunswick Wire Fence Co. Ltd., Moncton, N.B.	X	X	X
Otaco Ltd., Orillia, Ont.			X
Steel Company of Canada Ltd., Hamilton, Ont.	X	X	X
Sutherland Supply Ltd., Winnipeg, Man.		X	

A spokesman for Dosco estimated that Canadian production of fencing in recent years represented only about one third of productive capacity. As in the case of barbed wire, the machinery required for the manufacture of fencing is relatively inexpensive, whereas the costs of storage are high due to the seasonal nature of demand and the bulkiness of the product. Consequently, the excess capacity probably does not result in a particularly heavy burden of overhead for the industry.

Proposals - Stelco proposed that the fencing now specified in tariff items 402, 402a and Ex 402a be provided for as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire fencing, of iron or steel, coated or not, n.o.p.	15 p.c.	20 p.c.



THE CANADIAN MARKET FOR STEEL WIRE FENCING  
OTHER THAN BARBED WIRE

	1956	1958	1960	1961	1962	1963	1964
<u>Canadian Factory Shipments</u>							
Farm fencing	(tons) (\$'000)	12,968 2,632	13,390 2,933	12,353 2,768	13,906 3,074	14,059 3,062	13,933 3,035(a)
Chain link fabric	(tons) (\$'000)	5,877 1,622	7,135 1,864	7,639 1,889	8,725 2,133	9,069 2,423	11,483 3,068(a)
Lawn Fencing	(tons) (\$'000)	1,457 400	1,546 405	1,392 415	1,298 369	1,640 447	977(a) 266
Total	(tons) (\$'000)	20,302 4,654	22,071 5,201	21,384 5,072	23,929 5,576	24,768 5,932	26,393 6,369(a)
<u>Imports</u>							
Woven or welded fencing, 9-14 gauge	(\$'000)	234	236	153	342	277	..
Woven or welded fencing, other	(\$'000)	101	91	81	42	65	..
Total	(tons) (\$'000)	.. 335	.. 327	.. 234	.. 384	.. 342	849 147
<u>Exports</u>							
Woven wire fencing of iron or steel	(\$'000)	4	7	154	..	..	..
Domestic Disappearance	(tons) (\$'000)	.. 4,985	.. 5,521	.. 5,152	.. 5,960(b)	.. 6,274(b)	27,242(b) 6,516(b)
Imports as % of Domestic Disappearance	(Vol.) (Val.)	.. 6.7	.. 5.9	.. 4.5	.. 6.4(b)	.. 5.5(b)	3.1(b) 2.3(b)

(a) Estimated  
(b) No allowance made for exports

Source: D.B.S. Catalogue Numbers 41-006, 41-216 and Trade of Canada

Dosco made a similar proposal which was worded to include barbed wire fencing, thus eliminating the need of a separate tariff item for the latter.

Lundy Fence proposed rates of 5 p.c., B.P. and 15 p.c., M.F.N. for an item to be worded "wire fencing of iron or steel". The proposal was intended to cover the fencing now provided for in tariff items 402 and 402a, and the spokesman for Lundy pointed out that the proposed rates lay between the rates under the two existing items. He made the following comments regarding the proposed wording:

"In proposing a simplified wording, we have dropped any reference to 'woven or welded'. In our usage of words, all wire fence is either woven or welded, and these words therefore appeared to us redundant. Similarly, it appears to us that fence is fence whether or not coated, and that the words 'coated or not' are also redundant. We do not make any wire fence of iron or steel other than coated. Our proposals have referred to 'fencing' because this is the word that has been used in various tariff items now under review. As a minor point in the usage of words, we feel that it would be more correct to refer to 'fence'." (1)

The Canadian Importers Association made proposals which would have the effect of leaving the B.P. and M.F.N. rates on fencing unchanged.

The Institute of Iron and Steel Wire Manufacturers, Great Britain, made proposals which would have the effect of making fencing other than barbed wire dutiable at Free, B.P. and  $12\frac{1}{2}$  p.c., M.F.N.

---

(1) Transcript, November 6, 1963, p. 510

Wire Netting and Wire Cloth

Wire netting and wire cloth of iron or steel are dutiable under the following tariff items which fall within the scope of the present Reference:

		<u>B.P.</u>	<u>M.F.N.</u>
402a	...wire cloth or wire netting, of iron or steel, coated or not..	20 p.c.	35 p.c.
	...		
GATT:			
Ex. 402a	Wire cloth or wire netting, of iron or steel, coated or not.	17½ p.c.	25 p.c.
402b	Woven netting, of iron or steel, coated, made from wire of 17 gauge or heavier, with meshes not smaller than one inch and not larger than two inches, with specially strengthened joints, when for use exclusively on fur farms, under regulations prescribed by the Minister:		
	(1) Of a class or kind not made in Canada.....	5 p.c.	17½ p.c.
	(2) n.o.p. ....	12½ p.c.	20 p.c.
402g	Welded netting, of iron or steel, coated or not, made from wire of seventeen gauge or heavier, with meshes not smaller than one-half inch by one-half inch and not larger than two inches by two inches, when for use exclusively on fur farms, under such regulations as the Minister may prescribe.....	12½ p.c.	20 p.c.

The products which are classified under these tariff items can conveniently be discussed under the following three headings:

1. Wire cloth and screening are classified under tariff item Ex 402a if of iron or steel. If cut to size, however, they are classified along with the machines for which they are intended. Also, as a rough guide, products of wire thicker than 14 gauge or with meshes larger than two inches square are seldom classified as cloth or netting, but rather as screening and are entered elsewhere in the Tariff, usually under tariff item 446a.



2. Hexagonal mesh netting, otherwise known as poultry netting, is classified under tariff item Ex 402a.
3. Woven netting for fur farms and welded mesh netting. Woven netting for fur farms is classified under tariff item 402b and welded netting for fur farms is classified under tariff item 402g. Welded netting in small sizes for some other purposes is classified under tariff item Ex 402a, but the volume involved is not believed to be large.

Each of these three groups of products is considered separately in the pages which follow.

### Wire Cloth and Screening

The following four firms each produce a broad range of wire cloth and screening, under 60 inches in width, of steel and non-ferrous metals:(1)

Donald Ropes and Wire Cloth Limited, Hamilton

Greening Wire and Perforated Metal Company,  
Division of Greening Industries Ltd., Hamilton

Greening Metal Products and Screening Equipment Company,  
Division of Greening Industries Ltd., Hamilton

The W.S. Tyler Company of Canada Limited, St. Catharines.

There are, in addition, several firms engaged in the manufacture of fourdrinier wire cloth for paper making machines. Fourdrinier wire cloth, which is over 60 inches in width and which is made from wire of non-ferrous metals, is considered in the second volume of this Report.

The spokesman for the four principal manufacturers of wire cloth and screening (other than fourdrinier wire cloth) told the Board that they classified their products broadly according to the kinds of machines used in their manufacture, as follows:

- Wire cloth, woven on fully automatic looms. Such products would be classified under tariff item 351b if of brass or copper, and under tariff item Ex 402a if of steel. The industry can make cloth with a fineness of 40,000 openings per sq. in.
- "Wire screening" or "Space Cloth", manufactured on semi-automatic and, in many cases, on hand looms. Such products are usually of steel and, providing they were not of too large a mesh nor made of too thick a wire, would be classified under tariff item Ex 402a. Otherwise, screening is classified under other items such as tariff items 446a and 410w. The industry can make screening with wire as thick as one inch and a mesh as large as six inches square.

(1) The tariff items relating to wire cloth and screening of non-ferrous metals are considered in the second volume of this Report.

The cloth and screening made by these firms are used largely for industrial purposes. For example, they produce very fine stainless steel cloths for use in straining corrosive chemical liquids and, at the other extreme, they produce the heavy screens known as "grizzlies" which are used in the sizing of ores and rock.

Greening Industries was, in addition, the principal Canadian producer of insect screening, but it ceased production of this product subsequent to the public hearing. Insect screening is usually made on automatic looms of more limited capability than those used for the manufacture of industrial cloths. The Board heard that there are at least two other firms which manufacture insect screening; and there are a large number of small wire shops, located from coast to coast, equipped with semi-automatic or hand looms. A good deal of the metallic insect screening now produced in Canada is, however, of aluminum.

CANADIAN FACTORY SHIPMENTS OF WIRE CLOTH AND SCREENING  
((\$'000))

<u>Products</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Wire cloth other than Fourdrinier, including insect wire screening:-					
Steel	3,266	3,433	3,358	3,254	3,558
Non-Ferrous Metal	1,110	936	864	828	981
Total	4,376	4,369	4,222	4,082	4,539

Source: D.B.S. Catalogue No. 41-216

Complete statistics of external trade in wire cloth and screening first became available in 1963.

IMPORTS AND EXPORTS OF WIRE CLOTH AND SCREENING

	<u>Insect Wire Screening</u>			<u>Wire Cloth and Woven Wire Screen, n.o.p.</u>		
	<u>Imports</u>		<u>Exports</u>	<u>Imports</u>		<u>Exports</u>
	'000 lbs.	\$'000	\$'000	'000 lbs.	\$'000	\$'000
1963	972	362	23	832	695	457
1964 (a)	379	201	6	1,344	807	600

(a) 1964 imports estimated from figures for first nine months. See s.c. 46343 and s.c. 46352

Source: D.B.S. Trade of Canada

Of the total imports of insect screening in 1963, about 60 per cent by value and four fifths by volume came from Japan and were said at the public hearing to have been of steel wire. Nearly all the remainder came from the United States and was said to have been largely of aluminum. In 1964 imports from Japan declined to almost negligible



proportions and the United States became the principal supplier. Production of steel insect screening in Canada appears to have been discontinued altogether in 1964, partly because of import competition and partly because of competition from imported and domestic screening of other materials such as aluminum and fibre glass.

With regard to imports of "wire cloth and woven wire screen, n.o.p." the United States has been the principal supplier, and by far the greater part is known to have consisted of steel wire rather than of non-ferrous metal wire. It would appear that Canadian producers are able to compete in certain lines but not in others. They cannot compete with European producers in some of the finest meshes which have a high labour content and a small market, and they apparently cannot compete in some other lines in which producers in the United States have advantages of longer runs. A spokesman for the Quebec Asbestos Mining Association estimated that the members of that Association imported about a quarter by value of their requirements of screening. A spokesman for the wire cloth and screening manufacturers described the competitive situation with regard to wire cloth and screening, including insect screening, in the following terms:

"The majority of the products imported under Tariff Items 351b and 402a come from the United States where large volume markets permit the manufacturers to produce and sell their products at very low prices both at home and abroad. Other imports come principally from Japan and Europe which have, in addition to large volume markets, much lower wage rates than we have in Canada. In all cases, the exporters ship only those items which can be manufactured in volume and which have a relatively large market in Canada. This skims off the very necessary production required by the Canadian manufacturers to make it possible for them to service the large percentage of small and special orders required by Canadian industry."(1)

The four manufacturers, in a joint brief, proposed no changes in existing rates of duty, but they proposed some changes in wording and arrangement which they said was "in order to provide a basis for collecting accurate statistics". The details of their proposals are contained in the table on the following page.

The Quebec Asbestos Mining Association presented a brief contending that the duties on wire cloth and screen used by its members were too high and should be reduced. The members are substantial users of wire cloth and screening, and indicated that they obtained 75 per cent of their requirements from Canadian producers.

The Canadian Importers Association proposed that tariff item 402a and ex 402a be changed to:

---

(1) Transcript, November 7, 1963, p. 765-6



PROPOSALS BY FOUR MANUFACTURERS OF OTHER WIRE CLOTH AND SCREENING (a)

Existing Tariff Items

Proposed Tariff Items

	<u>B. P.</u>	<u>M. F. N.</u>		<u>B. P.</u>	<u>M. F. N.</u>
402a Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.; wire cloth or wire netting, of iron or steel, coated or not.....	20 p.c.	35 p.c.	402a Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.....	20 p.c.	35 p.c.
GATT			GATT.....	12½ p.c.	20 p.c.
Ex. GATT Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.....	12½ p.c.	20 p.c.	402a (1) Woven Wire Cloth of iron or steel, coated or not, n.o.p.....	20 p.c.	35 p.c.
Ex. Wire cloth or wire netting, of iron or steel, coated or not.....	17½ p.c.	25 p.c.	GATT.....	17½ p.c.	25 p.c.
			402a (2) Wire netting, of iron or steel, coated or not, n.o.p.....	20 p.c.	35 p.c.
			GATT.....	17½ p.c.	25 p.c.

(a) Donald Ropes and Wire Cloth Limited  
 Greening Wire and Perforated Metal Company  
 Greening Metal Products and Screening Equipment Company  
 The W.S. Tyler Company of Canada Limited

B.P.M.F.N.

402a(i)	Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.; wire cloth or wire netting, of iron or steel, coated or not	12½ p.c.	20 p.c.
402a(ii)	Insect screening	20 p.c.	35 p.c.

The effect of this proposal would be to reduce the duties on steel wire cloth and netting from the existing rates of 17½ p.c., B.P. and 25 p.c., M.F.N.; the proposals would, in addition, increase the duties on all insect screening, including aluminum insect screening which is outside the terms of the Reference. The spokesman for the Association gave the following explanation of the proposals:

"It is submitted that the existing statutory rates of duty under tariff item 402a are outrageously high in relation to existing tariff rates applicable to almost any other type of commodity imported into Canada. Therefore, it is recommended that the existing GATT rates covering woven or welded wire fencing, being a B.P. rate of 12½% and M.F.N. rate of 20%, be made applicable to everything (with one exception) presently covered by the statutory wording of tariff item 402a. The one exception concerns imports of insect screening where imports are very substantial."(1)

The Society of Chain Link Fencing Manufacturers, Great Britain, proposed that the duties on cloth and netting be reduced to Free, B.P., and 12 p.c., M.F.N.

### Hexagonal Mesh Netting

Hexagonal netting, commonly known as poultry netting, is produced by one firm in Canada, the Greening Wire and Perforated Metal Company, Division of Greening Industries Limited, Hamilton. The company produces hexagonal netting in one-inch mesh and two-inch mesh. There are other sizes in demand which must be imported; included among these is the size most commonly used in stucco construction, and for which there is a substantial market, particularly in the West where stucco houses are popular. The company, which makes a variety of products in addition to hexagonal netting, draws and galvanizes its own wire. The cost of wire rod is equivalent to about half the selling price of hexagonal mesh.

A spokesman for Greening estimated that his firm supplied about half the Canadian market for hexagonal netting and all the market for the two sizes made in Canada. Subsequently, however, he indicated that his company was not able to compete west of the lake-head. He estimated that about half the total consumption in Canada was for poultry enclosures, the rest being for stucco reinforcement and other uses.

(1) Transcript, November 8, 1963, p. 1002-3

Statistics of Canadian production of hexagonal netting are confidential, and imports are not recorded separately. However, imports of "wire netting" amounted to 1,009 tons and were valued at \$289,517 in 1963 and an estimated 621 tons valued at \$212,938 in 1964; it is believed that about three fourths of these amounts were accounted for by hexagonal mesh. Nearly half the total value of "wire netting" imports in 1963 were entered through British Columbia. Great Britain, countries of the E.C.S.C., Japan and the United States all shipped hexagonal mesh to Canada.

The B. Greening Wire and Perforated Metal Company sought continuation of present rates of duty under tariff item Ex 402a as it applies to hexagonal mesh. The spokesman for the company said that hexagonal mesh had never been a very profitable item and that at the time of the public hearing his company was making no profits at all on it. He said that competition from imports had forced his company to reduce the price from about 19 cents per pound to 16 cents per pound in the early part of 1963.

Wirth Limited proposed that no change be made in tariff item 402a. With regard to hexagonal mesh netting, the spokesman for the company said:

"It can be produced by use of duty-free wire rods or wire from Commonwealth countries; more modern production methods, devaluation and the high tariff protection, reduced imports in Central and Eastern Canada to a trickle except for the sizes not made in Canada." (1)

He proposed that the statutory rates under tariff item 402a be reduced to  $12\frac{1}{2}$  p.c., B.P., and 20 p.c., M.F.N.

The British Wire Netting Export Group proposed that the rates of duty on hexagonal mesh be reduced to Free, B.P., and  $12\frac{1}{2}$  p.c., M.F.N. The spokesman for the group said:

"Our request for free entry is based on the fact that production of this material in Canada is limited and it is a specialty of the British wire industry." (2)

#### Woven Netting for Fur Farms and Welded Netting

We are here concerned with woven netting for fur farms as specified in tariff item 402b, welded netting for fur farms as specified in tariff item 402g, and with such welded netting as might be classified as netting or cloth under tariff item Ex 402a.

Woven netting for fur farms has been largely replaced by welded netting in the past few years. The change has been ascribed to new methods of spot welding which result in the production of a corrosion-resistant welded fabric. Welded netting of types used on fur farms is produced in Canada, Stelco in Hamilton and B.R.C. Weldmesh (1960) Limited in Vancouver being among the producers. A spokesman for the Canada Mink Breeders, whose members produce about

(1) Transcript, November 8, 1963, p. 1019

(2) Same, Nov. 8, 1963, p. 881



90 per cent by value of the fur pelts of all kinds produced on ranches in Canada, said that some sizes and types of netting for fur farms were not made in Canada. A spokesman for B.R.C. Weldmesh indicated that his company produced the types which were in demand. The mink breeders estimated their annual consumption of netting at about \$500,000. Imports of both woven and welded netting for fur farms were valued at \$64,000 in 1962, the last year in which separate statistics were published.

The spokesman for the mink breeders estimated that purchases of netting constituted about ten per cent of the total costs of raising mink. Each individual mink must be kept in a separate pen during the priming period. The value of pelts produced on fur farms has been increasing, and was valued at about \$19 million in 1962, nearly all the production consisting of mink. At the same time, the spokesman for the mink breeders pointed out that the number of mink ranchers has been declining, and he said that only about five per cent of them could be described as large and successful operators. He pointed out that Canadian producers must compete on world markets with producers in other countries where netting can be obtained more cheaply than in Canada.

Some welded netting for purposes other than on fur farms is probably classified as netting under tariff item ex 402a, but the amount is believed to be small. Most welded mesh is classified under tariff item 446a.

Proposals - The Canada Mink Breeders proposed duty-free entry under tariff items 402b and 402g. The spokesman for the mink breeders informed the Board that the netting entered under tariff item 402b had been ruled of a class or kind made in Canada, so that the effective rate of duty under the item is now  $12\frac{1}{2}$  p.c., B.P. and 20 p.c., M.F.N.

A number of proposals were made which would have the effect of consolidating the provisions for welded mesh in one tariff item. Stelco proposed the creation of the following item:

	<u>B.P.</u>	<u>M.F.N.</u>
Welded wire fabric, of iron or steel, coated or not.....	15 p.c.	20 p.c.

The item would encompass goods now entered mainly under tariff items 402g and 446a. Under the proposal the B.P. rate on goods now entered under tariff item 402g would be raised by  $2\frac{1}{2}$  percentage points and the M.F.N. rate would remain unchanged.

Lundy Fence Company Limited proposed that a single tariff item be established as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire mesh or wire netting of iron or steel	10 p.c.	$22\frac{1}{2}$ p.c.

The item proposed by Lundy was to embrace wire netting in existing items 402a, 402b and 402g. As worded it would also embrace mesh in tariff item 446a. The company took the position that if the Board did not consider tariff item 446a within its terms of Reference the wording of the proposed item could be changed to exclude welded wire mesh for concrete reinforcement. In any event the proposed rates are the same as those under tariff item 446a.

B.R.C. Weldmesh made a proposal respecting fur farm netting and certain other products some of which may now be classified under tariff item ex 402a. The company proposed:

"...that wire mesh products (such as welded wire reinforcing mesh, fur farm mesh, stucco mesh and block mesh) be dutiable at the rates now applicable to welded wire reinforcing mesh under tariff item 446a, namely 10% B.P., 22½% M.F.N."(1)

Dosco suggested the deletion of tariff items 402b and 402g, in which case the goods imported under them would be classified under tariff item Ex 402a. This was "in the interest of tariff consolidation". Dosco does not at present produce netting for fur farms as covered by these two items.

Irving Wire Products Ltd., proposed that the rates under 402a be left unchanged.

The Canadian Importers Association proposed that tariff items 402b and 402g be deleted and made dutiable along with other netting at 12½ p.c., B.P. and 20 p.c., M.F.N.

The Institute of Iron and Steel Wire Manufacturers proposed that the cloth and netting now falling under tariff item 402b and ex 402a be made duty-free under the B.P. Tariff and that the rate under the M.F.N. Tariff be reduced to 12½ p.c.

---

(1) Transcript, November 6, 1963, p. 555

Materials for Speedometer Parts

Certain materials used in conjunction with speedometers are provided for in the following tariff items:

	<u>B.P.</u>	<u>M.F.N.</u>
402e Speedometer flexible shafting, consisting of a steel centre wire around which two or more layers of steel wire are helically wound consecutively in opposite directions, in coils of not less than 1,000 feet, when imported by manufacturers of speedometers or speedometer parts, for use in the manufacture or repair of such articles.....	Free	Free
402f Wire, cold drawn, galvanized, tempered or not, in coils of not less than 5,000 feet, for use in the manufacture of flexible outer casing for speedometer cables....	Free	Free

The items are of interest to the following two manufacturers who supply speedometer cable and casing assemblies to the automobile industry and for replacement purposes:

Stewart-Warner Corporation of Canada Limited, Belleville, Ont.

Perfection Automotive Products (Windsor) Ltd., Windsor, Ont.

Tariff Item 402e - This item was introduced in 1949 at the request of Stewart-Warner. At the time, the company could not obtain suitable wire for the manufacture of shafting in Canada, and it imported the finished shafting from the United States. In 1955 Stelco began supplying Stewart-Warner with the wire used in the manufacture of .130 inch shafting, which is the size most widely used; since that time, Stewart-Warner has been manufacturing that size of shafting in Canada. The Board understands that Stewart-Warner is now manufacturing all the most widely used sizes of shafting with wire obtained from Stelco.

Perfection Automotive Products (Windsor) Limited does not manufacture shafting, and imports its requirements; the only Canadian source of supply is its competitor, Stewart-Warner.

Stewart-Warner proposed that tariff item 402e be revised by removing shafting in diameters .130 and smaller from its scope; such shafting would then become dutiable under tariff item 401(b) at 15 p.c., B.P. and 25 p.c., M.F.N. or possibly under tariff item 446a.

Perfection Automotive Products, on the other hand, proposed that tariff item 402e be left unchanged. A spokesman for the company made it very clear that he did not want to be in the position of having



to buy from his competitor in Canada. In addition, he discussed other sources of supply as follows:

"The shafting is very difficult to make. In fact there are to the best of my knowledge only four companies in the United States who can even make this shafting and one happens to be the parent firm of our competitor here in Canada. Another one is the A.C. Division of General Motors Corporation. So therefore there are only two other manufacturers of this shafting in the United States. So you can see our difficulty in not being able to manufacture it in our own plant. In fact in the United Kingdom there are only two manufacturers of this shafting."<sup>(1)</sup>

Tariff Item 402f - This item, like tariff item 402e, has been in the Tariff since 1949, and the wire specified in it was not made in Canada until very recently. Stewart-Warner reported that in 1963 it had begun using Canadian wire supplied by Stelco for the production of flexible outer casings. Stewart-Warner took the stand that tariff item 402f "could be removed at any time."

Perfection Automotive Products, however, was in a different position, and proposed that the item be retained in its present form. The requirements of the company have always been very much smaller than those of Stewart-Warner, but the spokesman for Perfection indicated that his company had a substantial part of the replacement business in Canada. In addition, he indicated that, on account of the relatively small volumes involved, his company had not been able to reach a satisfactory arrangement with Stelco for the supply of the wire specified in tariff item 402f. Consequently, Perfection has continued to import under that tariff item. The spokesman for Perfection stated:

"Sources outside of Canada can easily handle our business as they inventory this material or produce it in such quantities that our requirements can be easily handled. Thus we can order the quantities we need; receive good delivery; and we can buy at prices which permit us to be competitive."<sup>(2)</sup>

He estimated his company would require only about 25,000 pounds of the wire annually; in comparison, Stewart-Warner purchases from Stelco in carload quantities.

If tariff item 402f were removed as proposed by Stewart-Warner, the wire now classified under it would become dutiable under tariff item 401(c) at 7½ p.c., B.P. and 20 p.c., M.F.N. or under tariff item 401(e) at 10 p.c., B.P. and 20 p.c., M.F.N., depending upon the shape.

Both Dosco and Stelco proposed that tariff item 402f be deleted and that the wire now provided for under it be made dutiable under the following proposed item:

	<u>B.P.</u>	<u>M.F.N.</u>
Wire of iron or steel, n.o.p.	15 p.c.	20 p.c.

(1) Transcript, November 8, 1963, p. 828-9

(2) Same, November 8, 1963, p. 827-8

Webster and Horsfall (Canada) Limited proposed that tariff item 402f be retained but that a most-favoured-nation duty of  $7\frac{1}{2}$  p.c. be imposed.

### Other Tariff Items

#### Tariff Item 446m

	<u>B.P.</u>	<u>M.F.N.</u>
Welding rods or welding wires of rust, acid or heat resisting steel, whether or not flux-coated.....	10 p.c.	15 p.c.

This item encompasses a variety of special types of welding electrodes, some of which are made in Canada and some of which are not.

The only representation made with respect to this item was by Air Reduction of Canada Limited which proposed that the item be left unchanged.

#### Tariff Item 456

	<u>B.P.</u>	<u>M.F.N.</u>
Wire of brass, zinc, iron or steel, screwed, twisted, flattened or corrugated, for use exclusively in connection with nailing machines for the manufacture of boots and shoes, in boot and shoe factories, under regulations prescribed by the Minister.....	Free	Free

This item dates back to 1930. Despite inquiries which were made by the Board, no one interested in the retention of the item has been found. Import statistics are not available separately after 1957. However, for the years 1947 to 1957, inclusive, imports were valued at an average of \$6,885 per year.

Dosco proposed the deletion of the words "iron or steel" from the item. The spokesman for the company stated:

"It is believed this Tariff Item is inoperative in respect of iron or steel wire. As far as can be ascertained, iron or steel wire is not imported, in the forms specified, for use in the manufacture of boots and shoes."<sup>(1)</sup>

The Institute of Iron and Steel Wire Manufacturers proposed that the item be deleted.

---

(1) Transcript, November 4, 1963, p. 254







SUMMARY AND CONCLUSIONS

This first Volume of the Board's Report on Wire and Wire Products deals only with products of iron or steel; Volume II of the Report will deal with those of other metals.

This Volume covers wire rod, which is used to draw down into wire, wire of all kinds and certain wire products, the principal ones being fencing, rope, mesh, netting and screening.

The Canadian manufacturers concerned may conveniently be considered in two groups: first, the two integrated producers, the Dominion Steel and Coal Corporation Limited (Dosco) and the Steel Company of Canada Limited (Stelco), who not only make wire rod but also wire and wire products; second, some fifteen or twenty unintegrated producers who must purchase their requirements of wire rod or wire. Some of the latter are engaged in the manufacture of nails, fencing and other products in competition with the two integrated suppliers; others produce wire rope and other products not made by Dosco or Stelco.

With regard to wire rod and wire, the two integrated producers proposed in effect the elimination of all the end-use tariff items including the two covering wire rods, and the consolidation of all items covering wire into three, one covering uncoated round wire, one covering galvanized round wire and one covering all other wire. On wire rods, the elimination of the two end-use items 379c and 379d would have the effect of increasing the duty on most imports from \$3.00 per ton, equivalent to about three to four per cent at present prices, to ten per cent; on wire the proposals of this first group would entail some increases and some decreases but on balance duties would be increased.

The second group, the unintegrated producers, proposed either the continuation of the present rates of duty on wire rod or duty-free entry; on wire and wire products they proposed either no change in the existing rates of duty, or in some cases, increases in the present rates.

As might be expected, since both the producing and consuming interests were represented, the most contentious matter in the inquiry was the duty on wire rods. Prior to 1950, imports of wire rods had been negligible; in fact at that time there were only three unintegrated producers with wire-drawing equipment. Imports increased substantially in 1958 and 1959 due to a strike at Stelco. Since 1960 they have again been increasing due both to a wider discrepancy between domestic and European prices and, more recently, to the inability of the two Canadian producers to meet the increasing demand; in 1964 at least one of the producers itself imported wire rods.

In recent years a number of unintegrated producers have installed wire-drawing equipment and at present the total consumption of wire rod by the unintegrated producers probably exceeds 100,000 tons, a many-fold increase since 1950. Dosco has just completed the installation of a new bar and rod mill and Stelco has announced its

intention to install a new bar and rod mill as well. It seems likely therefore that when these two new mills are in operation there will be sufficient capacity to meet most of our domestic requirements.

The Board found no evidence to suggest that the importation of wire rods in the past has significantly affected the two Canadian wire rod producers, and from what the Board has seen there is every reason to expect that these new mills will be capable of producing bar and rod at costs which will be competitive with other producers for the international steel market.

In summary, it seems to the Board that whether or not there is a duty on wire rod would make relatively little difference to the operations of the two Canadian producers; on the other hand, it is of great concern to many of the unintegrated producers. In all the circumstances, the Board is recommending that wire rod, when imported to be drawn into wire, be duty-free under both the British Preferential and Most-Favoured-Nation Tariffs.

Turning now to wire, the Board agrees with those who suggested that the present tariff structure is needlessly complicated and that differences in rates of duty among wires of different gauges, or among wires with different coatings or coverings, or among wires with different end uses, are largely unwarranted.

The manufacture of much of the wire produced from wire rods requires relatively little capital investment. The value added varies greatly with the type of wire produced; it is considerably less than fifty per cent of the cost of the rod in the case of many uncoated wires, and for only a small percentage of total wire production would it exceed one hundred per cent. It is apparent that the virtual duty-free entry of wire rod and the existing rates of duty on wire result in extremely high effective rates of duty on the value added. These high effective rates have particular significance for the unintegrated producers and, coupled with the drop in rod prices in the Common Market, may well have encouraged some of the many entrants into the wire-drawing business in Canada in recent years.

Galvanized wire for fencing, which is now duty-free, was the subject of considerable discussion at the public hearing. Dosco and Stelco proposed that this end-use provision, along with others, be deleted and that galvanized wire for all purposes be dutiable at  $12\frac{1}{2}$  p.c., B.P. and  $17\frac{1}{2}$  p.c., M.F.N. On the other hand, Lundy Fence Company Limited, an unintegrated producer of fencing, expressed concern that the imposition of a duty on galvanized wire would place the firm at a grave disadvantage in attempting to compete with Dosco and Stelco in the sale of fencing. While the Board was impressed by the position taken by Lundy Fence, particularly in relation to the rates proposed by Dosco and Stelco, it was also impressed by suggestions which were made that there is no insuperable obstacle to the installation of additional wire galvanizing capacity in Canada. Some wire galvanizing is already being done by two unintegrated producers. The expansion of wire galvanizing capacity by unintegrated producers would reduce the dependence upon Dosco and Stelco for galvanized wire. Clearly, the maintenance of duty-free entry for galvanized wire for fencing would not encourage such a development.



Roping wire has been free of duty from the United Kingdom and dutiable at only 5 p.c., M.F.N., under item 403(c). Under the Board's consolidation of existing wire items in Recommended Item II, there would be an increase of two and one-half percentage points in each of these rates of duty. The wire rope industry in Canada at the present time is entirely foreign controlled and the Board is of the opinion that the substantial imports of roping wire have been to some extent influenced by this fact.

The Board is recommending only one item for single wire to replace some 20 existing items or sub-items, including all end-use items. The item is sub-divided so that on plain round wire the Board is recommending a duty of  $2\frac{1}{2}$  p.c. under the British Preferential Tariff and  $7\frac{1}{2}$  p.c. under the Most-Favoured-Nation Tariff. On all other single wire of iron and steel, whether shaped, coated or covered, rates of 5 p.c., B.P. and 10 p.c., M.F.N. are recommended. In the second Volume the Board is recommending a definition for wire to be inserted in the Customs Tariff. It is intended that the definition conform generally to the present administration of the existing wire schedule, as far as iron or steel wire is concerned.

The recommended item covering single wire would involve some increases in rates and some decreases. Because import statistics are not available separately for each item, it is not possible to compute accurately the net effect of the Board's recommendations but on balance they would probably represent a decrease in duties of the order of \$150,000. Largely due to the increase in duty on roping wire the net effect on imports under the British Preferential Tariff might be an increase in the order of \$35,000, whereas on imports under the Most-Favoured-Nation Tariff the net effect might be a decrease of the order of \$185,000.

The wire products under review in this Volume may be considered in three categories: barbed wire, fencing and other fabric-like products, and wire rope and other multiple wires.

Barbed wire is relatively simple to produce; well over half the cost of production is accounted for by the cost of the galvanized wire. The Board is recommending that barbed wire be accorded the same rates as coated wire. In the past decade or so there have been a number of innovations in this rather simple product, at least on the Canadian market. Lighter gauge wires with higher tensile strengths have come into use and a new type of twisted wire has been introduced. Barbed wire is used principally in agricultural pursuits although it does have some other uses. Throughout the 1950's imports took an increasing share of a relatively stable market, reaching a peak of over 70 per cent by volume in 1960; since that time domestic shipments have increased so that by 1964 the market was shared almost equally between imports and domestic shipments. Dosco and Stelco account for a high proportion of total Canadian production; in fact there are reported to be only two other producers and one of them has not been active recently. In recent years imports have totalled around one million dollars, mostly from most-favoured-nation countries, notably Japan. Under Recommended Item III(a) the most-favoured-nation rate of duty would remain unchanged at 10 p.c.; the rate under the British Preferential Tariff would be increased from free to 5 p.c. In recent

years imports from the United Kingdom have been substantially less than \$100,000 per year.

Turning now to fencing and other fabric-like products, some of these, particularly fencing and the coarser sizes of mesh, are bulky in relation to their value, and transportation charges represent a significant element of protection for domestic producers. This is not true to nearly the same extent of the finer woven and welded products such as hexagonal mesh netting, wire cloth or wire screening. Most insect screening is no longer made from iron or steel wire but from aluminum or fibre glass. These finer products also involve considerably more labour and capital to manufacture than do the coarser products. However, there are infinite gradations from the coarser products to the finer ones, and the Board was made aware of the great administrative difficulty of distinguishing among these products in the Tariff. Consequently they are all brought together under Recommended Item III(b) which carries rates of  $7\frac{1}{2}$  p.c., B.P. and  $12\frac{1}{2}$  p.c., M.F.N. Certain welded wire products, such as concrete or stucco reinforcing mesh, which would be covered by the Board's Recommended Item III(b) now fall under tariff item 446a as manufacturers of iron or steel. However, it seems to the Board that all the fabric-like products enumerated in Recommended Item III(b), whether woven or welded, merit the same tariff treatment; most, if not all, producers of the products now falling under item 446a which would be affected were represented at the hearing before the Board.

All wire in forms other than single, together with wire rope and strand, are provided for in Recommended Item III(c). Of all the products covered in this Volume, wire rope and strand of the types used in rope are undoubtedly the most technically complex. The quality and size of the wire, the number and arrangement of wires in a strand, and the number and arrangement of strands in wire rope all vary according to the end use for which the wire rope is intended. Because of the variations possible in the end product this section of the industry is more subject to problems of short runs than are the other sections dealt with.

For one reason or another the wire rope industry has been plagued with excess capacity; production in recent years has not been much greater than it was twenty years ago, although capacity has been almost doubled. These and other difficulties encountered by the industry apparently have led to re-organization; in recent years four of the producers have come together under one company, the Wire Rope Industries of Canada Limited.

At the present time wire rope, n.o.p., together with wire, twisted, braided or stranded, n.o.p. are dutiable under tariff item 401(b) at 15 p.c. under the British Preferential Tariff and 25 p.c. under the Most-Favoured-Nation Tariff. However, there are end-use items covering many of these products, including the rope used in oil fields, logging, fishing and rigging ships, which have the effect of diluting this apparently high rate of protection to a considerable degree.



The end-use provisions for wire rope for use in logging, rigging ships and oilfields are contained in tariff items which were not referred to the Board as part of Reference 132. The end-use provision for logging is contained in item 411a, at 10 p.c., B.P. and 12½ p.c., M.F.N. The rates of duty proposed by the Board are not substantially different from the existing rates, and the deletion of the item in so far as it relates to wire rope would enable further consolidation of the wire schedule. The end-use provision for rigging ships is contained in item 440e, which provides duty-free entry for wire rope when so used, under regulations prescribed by the Minister. The provision for wire rope used in oilfields is contained in item 491, where rates of 5 p.c., B.P. and 10 p.c., M.F.N. apply. This provision followed a recommendation by the Board under Reference 130, and the present recommendation is designed simply to bring this provision for wire rope into conformity with the general schedule for wire and wire rope. The Board is of the opinion that the rates recommended in this Report for wire rope would permit the provision for wire rope in item 491 to be deleted without undue hardship to the oil and gas industries.

The Board is recommending that all the end-use provisions be eliminated and that a single sub-item provide for all wire other than single, together with wire rope and strand, with rates of 10 p.c. under the British Preferential Tariff and 15 p.c. under the Most-Favoured-Nation Tariff. Notwithstanding the two and one-half percentage points increase recommended by the Board on roping wire, the Board believes that the protection recommended on wire rope and strand, if effective over the whole market, would be sufficient to enable an efficient wire rope industry to prosper.

The three sub-items of the Board's Recommended Item III would replace twelve items or sub-items, in whole or in part, and would also encompass certain wire products now classified under tariff item 446a. Again it is not possible to compute accurately the effect of the Board's recommendations because the statistics have not been segregated by tariff item. The available information would suggest that the net effect would be some increase in duties under the British Preferential Tariff due principally to the removal of the end-use provisions, partially offset by the decrease of 5 percentage points in the rate on wire rope under tariff item 401(b). Under the Most-Favoured-Nation Tariff the net effect of the Board's recommendations would seem to be a reduction in duties of about \$250,000, mostly accounted for by the reduction from 25 p.c. to 15 p.c. in the rate on wire rope now imported under tariff item 401(b); however, the elimination of the end-use items covering wire rope for logging and for oil-field equipment and for commercial fishing operations would offset this reduction somewhat.

While the Board's recommendations would result in significant reductions in some of the existing rates of duty, they still leave adequate protection on the value added at most stages of processing, particularly in view of the duty-free recommendation for wire rod.





RECOMMENDED SCHEDULE

1. That tariff item 446m remain unchanged
2. That the following tariff items, enumerations of goods and rates of duty be revoked by Order in Council or deleted by amendment of Schedule A to the Customs Tariff: 379c, 379d, 401(a), 401(b), 401(c), 401(d), 401(e), 401(f), 401(g), 402, 402a, 402b(1), 402b(2), 402c, 402d, 402e, 402f, 402g, 402h, 403(a)(i), 403(a)(ii), 403(b), 403(c), 403(d), 403(e), 403(f), 403(g), 403(h), 409e(3) in so far as it relates to wire for baling farm produce, 411a and 491 in so far as they relate to wire rope, 440e, 456 and 596a, and that Schedule A to the Customs Tariff be further amended by inserting therein the following items, enumerations of goods and rates of duty:


Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
I	Rods of iron or steel, in the coil, not further processed than hot-rolled, for use in the manufacture of wire.....	Free	Free	20 p.c.
II	Wire of iron or steel, single:-			
	(a) Round	2½ p.c.	7½ p.c.	20 p.c.
	(b) Other than round	5 p.c.	10 p.c.	20 p.c.
	(c) Coated or covered with any material	.c.	10 p.c.	20 p.c.

Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
III	Products of wire of iron or steel, namely:-			
	(a) Barbed wire	5 p.c.	10 p.c.	20 p.c.
	(b) Cloth, fencing, mesh, netting and screening...	7½ p.c.	12½ p.c.	25 p.c.
	(c) Wire rope and strand; wires, twisted, braided, bunched or otherwise conjoined.....	10 p.c.	15 p.c.	25 p.c.




---

 First Vice-Chairman




---

 Member




---

 Member

Ottawa, July 6, 1965



NOTES ON RECOMMENDED ITEMS

relating to wire and wire products of iron or steel

Recommended Item I

Rods of iron or steel, in the coil, not further processed than hot-rolled, for use in the manufacture of wire

Free

Free

20 p.c.

This Recommended Item would provide for nearly all the rods now entered under tariff items 379c and 379d, the only effective change in duty being the elimination of the most-favoured-nation rate of \$3.00 per ton in tariff item 379c. The Recommended Item would also attract the wire rods greater than 0.375 inch in diameter which, because of the size limitation in tariff items 379c and 379d, are now entered under tariff item 379 at 5 p.c., B.P. and 10 p.c., M.F.N.

The words "not further processed than hot-rolled" should be of assistance in distinguishing products specified in tariff item 379b with rates of 5 p.c., B.P. and 15 p.c., M.F.N., from products specified in the Recommended Item. The Board was informed that some wire rod is imported with various coatings designed to facilitate subsequent processing. Such imports, which are small in relation to total imports of wire rod, are now classified either under tariff item 379b or 379c, depending upon the nature of the coating. It is expected that such coated wire rod would be excluded from the Recommended Item and would be classified under tariff item 379b.

In 1963 imports of hot-rolled wire rods were as follows:

	<u>Value</u> \$'000	<u>Value</u> per ton \$	<u>Duties as p.c.</u> <u>of Total Value</u>
From United Kingdom and Australia (includes some high quality rods for welding electrodes, spring wire and roping wire from the United Kingdom)	956	111	0.7
From Europe (Mostly Thomas quality)	5,442	90	3.9
From Japan (Mostly ordinary quality for nails, mesh and fencing)	660	98	3.2
Total	7,148	94	3.4

Some 90 per cent by volume of these imports are believed to have been entered under tariff item 379c, the remainder having been entered under tariff items 379 or 379d. Nearly all these imports would have qualified for duty-free entry under the Recommended Item. In 1964, total imports of hot-rolled wire rods were valued at \$11.3 million.

Recommended Item II(a)

Wire of iron or steel, single:-  
(a) Round

2½ p.c.

7½ p.c.

20 p.c.

This Recommended Item is intended to encompass the single, round, uncoated wire now classified under the following tariff items:

Tariff Item	Summary Description	B.P.	M.F.N.
401(g)	Wire, n.o.p.	15 p.c.	15 p.c.
402h	Wire for fencing	7½ p.c.	7½ p.c.
403(a)(i)	Spring wire - upholstering	Free	5 p.c.
(ii)	Spring wire - upholstering	5 p.c.	5 p.c.
403(c)	Roping wire	Free	5 p.c.
403(d)	Wire for commercial fishing	Free	7½ p.c.
403(h)	Music wire for mechanical springs	12½ p.c.	12½ p.c.
409e(3)	Wire for baling farm produce	Free	Free
596a	Music wire for pianos	10 p.c.	10 p.c.

Imports under these tariff items, which consisted mostly of single, round, uncoated wire, were valued at about \$8 million in 1963 and \$11 million in 1964. The average ad valorem rate of duty on total imports in 1963 from Commonwealth countries was about 1.7 p.c. and from other countries it was about 8.6 p.c. Had these imports been dutiable under Recommended Item II(a) there would have been an increase of about \$30,000 in duties on imports from Commonwealth countries; this is so mainly because of the large volume of roping wire from Britain which is now imported duty-free under tariff item 403(c). On the other hand, there would have been a decrease of about \$44,000 in duties on imports from other countries; this is principally because of the recommended decrease in duties on imports now entered under tariff item 401(g) at 15 p.c.

Recommended Item II(b)

Wire of iron or steel, single:-  
(b) Other than round

5 p.c.

10 p.c.

20 p.c.

The Board intends, in the second Volume of this Report, to recommend a definition of wire which will encompass the flat wire now specified in tariff item 401(c). Such wire would then qualify for

entry under Recommended Item II(b) or, if coated or covered, under Recommended Item II(c). The rates under tariff item 401(c) are  $7\frac{1}{2}$  p.c., B.P. and 20 p.c., M.F.N.; imports entered under the item were valued at \$312,000 in 1962, the last year for which separate records were kept.

Recommended Item II(b) is also intended to attract such single uncoated, steel wire other than round as may be encompassed by the other existing tariff items in the Reference, especially the following:

Tariff Item	Summary Description	B.P.	M.F.N.
401(g)	Wire, n.o.p.	15 p.c.	15 p.c.
402h	Wire for fencing	$7\frac{1}{2}$ p.c.	$7\frac{1}{2}$ p.c.
403(b)	Wire for corsets	Free	5 p.c.
403(c)	Roping wire	Free	5 p.c.
403(e)	Wire for machine card clothing	Free	Free
403(h)	Music wire for mechanical springs	$12\frac{1}{2}$ p.c.	$12\frac{1}{2}$ p.c.
456	Wire for footwear	Free	Free

Imports of single, uncoated wire other than round under any of these tariff items are not believed to be large; total imports of such wire under all these items are certainly much smaller than those entered under tariff item 401(c). In 1964 total imports of "wire, steel, flat or shaped" were valued at \$607,011, of which \$29,716 came from Britain.

#### Recommended Item II(c)

Wire of iron or steel, single:-

(c) Coated or covered with any material

5 p.c.                      10 p.c.                      20 p.c.

Recommended Item II(c) would provide for some or all the wire now classified under each of the following tariff items:

Tariff Item	Summary Description	B.P.	M.F.N.
401(c)	Flat wire	$7\frac{1}{2}$ p.c.	20 p.c.
401(d)	Galvanized wire	Free	10 p.c.
401(e)	Galvanized wire	10 p.c.	20 p.c.



Tariff Item	Summary Description	B.P.	M.F.N.
401(f)	Other coated wire	15 p.c.	25 p.c.
402c	Galvanized wire for fencing	Free	10 p.c.
402d	Galvanized wire for fencing	Free	Free
402f	Galvanized wire for speedometers	Free	Free
403(b)	Coated wire for corsets	Free	5 p.c.
403(c)	Roping wire	Free	5 p.c.
403(e)	Wire for machine card clothing	Free	Free
403(h)	Music wire for mechanical springs	12½ p.c.	12½ p.c.

Most imports of coated wire are recorded in the statistics shown in the following table:

Imports of Coated Wire, 1963

	Galvanized Wire Tariff Items 401(d), 401(e), 402c, 402d, 402f		Other Coated Wire Tariff Items 401(f), 403(e) and 403(h)	
	Value \$'000	Duties as p.c. of Total Value	Value \$'000	Duties as p.c. of Total Value
Imports under B.P. Tariff	403	3.7	78	13.2
Imports under M.F.N. Tariff	1,264	12.4	495	24.2
Total Imports	1,667	10.3	574	22.7

Judging from the statistics which are available, had Recommended Item II(c) applied to 1963 imports, duties paid under the B.P. Tariff would have been slightly lower, and those paid under the M.F.N. Tariff would have been about \$100,000 less than they actually were.

Some small part of the imports of "other coated wire" recorded in the statistics consists of rope and strand, which would fall under Recommended Item III(c). On the other hand, the statistics exclude considerable quantities of galvanized roping wire and core wire which are imported under tariff item 403(c) at Free, B.P. and 5 p.c., M.F.N.

Recommended Item III(a)

Products of wire of iron or steel, namely:-

(a) Barbed wire

5 p.c.

10 p.c.

20 p.c.

This Recommended Item would replace tariff item 401(a) under which barbed wire is now entered at Free, B.P. and 10 p.c., M.F.N. The recommended increase in the B.P. Tariff would bring the rate up to that recommended for galvanized wire. The recommended changes in wording are not intended to make the coverage of Recommended Item III(a) different from that of tariff item 401(a). The Board believes the words "barbed wire" are more descriptive of the product and more generally used than the words "barbed fencing"; there seems no need to add the phrase "coated or not".

Imports of barbed wire were valued at \$983,338 in 1964, of which \$59,494 came from Britain. On imports of the same magnitude, the duties paid under the B.P. Tariff would be increased by about \$3,000 as a result of the Board's recommendation.

Recommended Item III(b)

Products of wire of iron or steel, namely:-

(b) Cloth, fencing, mesh, netting and screening

7½ p.c.

12½ p.c.

25 p.c.

Recommended Item III(b) would provide for the products now entered under the following tariff items:

<u>Tariff Item</u>	<u>Summary Description</u>	<u>B.P.</u>	<u>M.F.N.</u>
402	Fencing	Free	12½ p.c.
Ex. 402a	Fencing	12½ p.c.	20 p.c.
Ex. 402a	Wire cloth or netting	17½ p.c.	25 p.c.
402b(1)	Wire netting for fur farms, of a class or kind not made in Canada	<del>5 p.c.</del> 5 p.c.	17½ p.c.
402b(2)	Woven netting for fur farms, n.o.p.	12½ p.c.	20 p.c.
402g	Welded netting for fur farms	12½ p.c.	20 p.c.

Imports of fencing have been relatively small due in part to high unit costs of transportation. Imports in 1963 amounted to \$170,611, of which \$94,276 came from Britain. Duties as a per cent of total value in 1963 averaged 3 p.c. on imports from Britain and 16 p.c.

on imports from other countries. On imports of the same magnitude, duties under the Recommended Item would be increased by some \$4,200 while those under the M.F.N. Tariff would be reduced by about \$2,600.

Imports of steel wire cloth, screening and netting appear to have been in the neighbourhood of \$1 million in 1963, mainly under tariff item Ex. 402a and from countries entitled to M.F.N. Tariff treatment. On imports of that magnitude the rates recommended would mean a reduction in duties of about \$130,000.

Recommended Item III(b) would also attract welded mesh which is now dutiable under tariff item 446a at 10 p.c., B.P. and 22½ p.c., M.F.N. Welded mesh is used principally for concrete and stucco reinforcing. Imports of "wire mesh, reinforcing type" were valued at \$159,811 in 1964, of which \$1,257 came from Britain; these imports represented a very small part of the Canadian market for mesh.

The word "screening" in Recommended Item III(b) is not at present found in tariff item Ex. 402a, although such products as insect screening are in fact entered thereunder. However, the insertion of the word in the Recommended Item would attract any industrial screenings which may at present be classified under tariff item 446a.

The high unit transportation costs on mesh and heavy screening tend to discourage imports.

#### Recommended Item III(c)

Products of wire of iron or steel, namely:-

(c) Wire rope and strand; wires, twisted, braided, bunched or otherwise conjoined

10 p.c.

15 p.c.

25 p.c.

This Recommended Item is intended to attract all the goods now classified under the following tariff items:

<u>Tariff Item</u>	<u>Summary Description</u>	<u>B.P.</u>	<u>M.F.N.</u>
401(b)	Twisted, braided or stranded, including wire rope or cable, coated or not, n.o.p.	15 p.c.	25 p.c.
403(f)	Wire for commercial fishing	Free	10 p.c.
403(g)	Wire rope or cable for commercial fishing	Free	10 p.c.
440e	Wire rope for rigging ships	Free	Free



The Recommended Item would, in addition, attract some of the goods now classified under the following tariff items:

Tariff Item	Summary Description	B.P.	M.F.N.
401(f)	Covered wire and cable	15 p.c.	25 p.c.
403(b)	Wire for corsets	Free	5 p.c.
411a	Wire rope for logging	10 p.c.	12½ p.c.
491	Wire rope for oil field work	5 p.c.	10 p.c.

In 1963 imports of wire rope, strand and other wires which would be covered by Recommended Item III(c) were valued at \$3.4 million, of which, \$1.5 million came from Britain; duties as a per cent of the value of total imports averaged 8.5 p.c. under the B.P. Tariff and 19 p.c. under the M.F.N. Tariff. On imports of the same magnitude, the Recommended Item would mean an increase of about \$22,000 in duties paid under the B.P. Tariff and a decrease of about \$80,000 in duties paid under the M.F.N. Tariff. The increase in B.P. duties would result from the recommended elimination of end-use items, particularly item 403(g) under which imports from Britain valued at about \$500,000 have been entering free of duty. The decrease in M.F.N. duties would result from the reduction from 25 p.c. under tariff item 401(b) to 15 p.c.

In 1964 imports were valued at a little over \$4 million, of which nearly half came from Britain.



NOTES ON EXISTING ITEMS

relating to wire and wire products of iron or steel

Existing Items 379c and 379d

379c Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, when imported by manufacturers of wire for use in the manufacture of wire, in their own factories

Free	\$3.00 per ton	\$5.00 per ton
------	----------------	----------------

379d Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, for use in the manufacture of wire for wire fencing

Free	Free	\$5.00 per ton
------	------	----------------

On the deletion of these two items the rods now entered under them would be provided for under Recommended Item I, duty-free under both the British Preferential and Most-Favoured-Nation Tariffs. Some 90 per cent of imports of wire rods are entered under tariff item 379c, mainly under the M.F.N. Tariff; the remainder are entered under tariff items 379 and 379d. The M.F.N. duty of \$3.00 per ton under existing item 379c averages about 3 p.c. ad valorem. Total imports of wire rods in 1964, mainly from countries entitled to most-favoured-nation rates, amounted to about 118,000 tons and were valued at \$11 million.

Existing Item 401(a)

401 Wire, of iron or steel:-  
(a) Barbed fencing, coated or not

Free	10 p.c.	10 p.c.
------	---------	---------

Under the Board's recommendation barbed fencing would be entered under Recommended Item III(a) as barbed wire at rates of 5 p.c., B.P. and 10 p.c., M.F.N.

Annual imports for the five years 1960-64 inclusive have averaged just over \$1 million; most of these imports were entered under the Most-Favoured-Nation Tariff at the same rate as that recommended.

The Board is recommending the same rates for barbed wire as for galvanized wire from which most barbed wire is made. This results in an increase in the British preferential rate from Free to 5 p.c.



Existing Item 401(b)

401 Wire, of iron or steel:-

(b) Twisted, braided or stranded, including wire rope or cable, coated or not, n.o.p.

15 p.c.

25 p.c.

25 p.c.

On the deletion of this item the goods now entered under it would be provided for in Recommended Item III(c) at 10 p.c., B.P. and 15 p.c., M.F.N. In 1964, imports under tariff item 401(b) amounted to an estimated \$2.5 million, about half of which came from Britain. However, some refunds of duty are believed to have been made when the imported products were sold in Canada for use in the fishing and lumbering industries, for the rigging of ships or for the exploration of oil and gas.

Existing Item 401(c)

401 Wire, of iron or steel:-

(c) Drawn flat or cold rolled flat after drawing, coated or not, n.o.p., not more than .25 inch in width and less than .1875 inch in thickness

7½ p.c.

20 p.c.

20 p.c.

Under existing administration, a product which was cold rolled flat after drawing would not be classed as wire if it were not specifically provided for in tariff item 401(c). Consequently, with the deletion of tariff item 401(c), products cold rolled flat after drawing would be classified elsewhere in the Tariff as steel strip. It is the intention of the Board, however, in the second Volume of this Report, to recommend a definition of steel wire which will encompass the products now classified under tariff item 401(c). Then, with the deletion of tariff item 401(c) the products now entered under it would be provided for in Recommended Item II(b) if uncoated and in Recommended Item II(c) if coated or covered; rates of 5 p.c., B.P. and 10 p.c., M.F.N. are recommended for both of these items.

In 1962, the last year for which separate records were kept, imports under tariff item 401(c) were valued at \$312,000; they came largely from the United States.

Existing Items 401(d) and 401(e)

401 Wire, of iron or steel:-

(d) Coated with zinc or spelter, curved or not, in coils, .144, .104, or .092 inch in diameter, with tolerance not to exceed .004 inch, and not for use in telegraph or telephone lines, n.o.p.

Free

10 p.c.

10 p.c.

(e) Coated with zinc or spelter, n.o.p.

10 p.c.

20 p.c.

20 p.c.

The wire now entered under these two sub-items is provided for in Recommended Item II(c) at 5 p.c., B.P. and 10 p.c., M.F.N.

Imports entered under tariff items 401(d) and 401(e) are estimated to have been valued at about \$1 million in 1963, of which perhaps a fifth came from Britain. Imports under tariff item 401(e) are known to have been larger than those under tariff item 401(d).

Existing Item 401(f)

401 Wire, of iron or steel:-

(f) Single or several, coated, n.o.p., or covered with any material, including cable so covered

15 p.c.

25 p.c.

30 p.c.

The wire now entered under this item is provided for in Recommended Item II(c) at 5 p.c., B.P. and 10 p.c., M.F.N., if single. Otherwise, it would fall under Recommended Item III(c) at 10 p.c., B.P. and 15 p.c., M.F.N. Imports entered under tariff item 401(f), believed to have consisted chiefly of single wire, were valued at about \$734,000 in 1964; the United States was the principal source of supply.

Existing Item 401(g)

401 Wire, of iron or steel:-

(g) N.o.p.

15 p.c.

15 p.c.

20 p.c.

Most of the imports entered under this item are round, uncoated wire, which is provided for in Recommended Item II(a) at  $2\frac{1}{2}$  p.c., B.P. and  $7\frac{1}{2}$  p.c., M.F.N. Such wire in shapes other than round as may be entered under tariff item 401(g) is provided for in Recommended Item II(b) at 5 p.c., B.P. and 10 p.c., M.F.N. Imports entered under tariff item 401(g) were estimated at about \$1.8 million annually at the time of the public hearing in 1963. They may have exceeded \$4 million in 1964, when total consumption of all wire increased by about twenty per cent; the United States and Japan were the principal foreign sources of supply.

Existing Item 402

402 Woven or welded wire fencing, of iron or steel, coated or not, from wire not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch; wire fencing, of iron or steel, coated or not, n.o.p.

Free

$12\frac{1}{2}$  p.c.

15 p.c.

On deletion of this item the products now entered thereunder would fall under Recommended Item III(b) at  $7\frac{1}{2}$  p.c., B.P. and  $12\frac{1}{2}$  p.c., M.F.N. In 1962, the last year for which separate records were kept, imports under tariff item 402 were valued at \$277,294, of which \$127,075 came from Britain. In 1964, total imports of wire fencing under all tariff items were valued at only \$167,506.

Existing Item 402a

402a Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.; wire cloth or wire netting, of iron or steel, coated or not

20 p.c. 35 p.c. 35 p.c.

Ex. Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.

$12\frac{1}{2}$  p.c. 20 p.c.

Ex. Wire cloth or wire netting, of iron or steel, coated or not

$17\frac{1}{2}$  p.c. 25 p.c.

On the deletion of this item the products now entered thereunder would become dutiable under Recommended Item III(b) at  $7\frac{1}{2}$  p.c., B.P. and  $12\frac{1}{2}$  p.c., M.F.N. In 1962, the last year for which separate records were kept, imports of woven or welded wire fencing entered under tariff item Ex. 402a were valued at \$64,565, of which \$15,700 came from Britain. In the same year imports of wire cloth, screening or netting entered under tariff item Ex. 402a were valued at \$1,029,735; these imports came mainly from countries entitled to Most-Favoured-Nation Tariff treatment.

Existing Item 402b

402b Woven netting, of iron or steel, coated, made from wire of 17 gauge or heavier, with meshes not smaller than one inch and not larger than two inches, with specially strengthened joints, when for use exclusively on fur farms, under regulations prescribed by the Minister:

(1) Of a class or kind not made in Canada

5 p.c.  $17\frac{1}{2}$  p.c. 30 p.c.

(2) N.o.p.

$12\frac{1}{2}$  p.c. 20 p.c. 30 p.c.

The netting now classified in this item is provided for in Recommended Item III(b) at  $7\frac{1}{2}$  p.c., B.P. and  $12\frac{1}{2}$  p.c., M.F.N. The Board was informed that for fur farms woven netting had been replaced by welded netting.



Existing Items 402c and 402d

402c Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories

Free                      10 p.c.                      10 p.c.

402d Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories

Free                      Free                      Free

The wire specified in these two end use tariff items is provided for in Recommended Item II(c) at 5 p.c., B.P. and 10 p.c., M.F.N. Tariff item 402c has probably not been used since the establishment of tariff item 402d in 1947. Imports entered under tariff item 402d are estimated to have averaged between \$600,000 and \$700,000 in recent years. It will be noted that the British preferential and most-favoured-nation rates recommended are the same as those recommended for barbed wire and  $2\frac{1}{2}$  percentage points lower than those recommended for other fencing.

The structure of the recommended rates on wire is predicated on the deletion of tariff items 402c, 402d and other end use items.

Existing Items 402e and 402f

402e Speedometer flexible shafting, consisting of a steel centre wire around which two or more layers of steel wire are helically wound consecutively in opposite directions, in coils of not less than 1,000 feet, when imported by manufacturers of speedometers or speedometer parts, for use in the manufacture or repair of such articles

Free                      Free                      35 p.c.

402f Wire, cold drawn, galvanized, tempered or not, in coils of not less than 5,000 feet, for use in the manufacture of flexible outer casing for speedometer cables

Free                      Free                      20 p.c.

With the deletion of these two items the products now entered under them would be classified according to their nature rather than their end use. The wire now entered under tariff item 402f would be provided for either under Recommended Item II(b) or II(c), at 5 p.c., B.P. and 10 p.c., M.F.N. Some of the goods prev-

iously entered under tariff items 402e and 402f may qualify for duty-free entry under tariff item 950 as automobile parts.

The value of imports under tariff items 402e and 402f is known to be relatively small and has been declining, although the items are of considerable interest to the principal importer.

Existing Item 402g

402g Welded netting, of iron or steel, coated or not, made from wire of seventeen gauge or heavier, with meshes not smaller than one-half inch by one-half inch and not larger than two inches by two inches, when for use exclusively on fur farms, under such regulations as the Minister may prescribe

12½ p.c.

20 p.c.

35 p.c.

On the deletion of this item the product entered under it would be provided for in Recommended Item III(b) at 7½ p.c. and 12½ p.c. In 1962, the last year for which separate records were kept, imports under tariff item 402g were valued at \$64,163.

Existing Item 402h

402h Wire, of iron or steel, uncoated, curved or not, in coils, not more than 0.144 inch and not less than 0.080 inch in diameter, with tolerance not to exceed 0.004 inch, for use in the manufacture of woven or welded wire fencing

7½ p.c.

7½ p.c.

20 p.c.

The wire now specified in this item is, for the most part, provided for in Recommended Item II(a) at 2½ p.c., B.P. and 7½ p.c., M.F.N. Tariff item 402h has been used little, if at all, in recent years.

Existing Item 403(a)

403 Wire of steel:-

(a) Spring, not less than .40 per centum, by weight, of carbon, when imported for use exclusively in the manufacture of springs for mattresses, cushions or upholstery:-

(i) .128, .116, .104 and .092 inch in diameter, with a tolerance not to exceed .003 inch

Free

5 p.c.

7½ p.c.

(ii) .144, .080, .072, .064, .056 and .048 inch in diameter, with a tolerance not to exceed .003 inch

5 p.c.

5 p.c.

7½ p.c.

The wire specified in both parts of this item is provided for in Recommended Item II(a) at  $2\frac{1}{2}$  p.c., B.P. and  $7\frac{1}{2}$  p.c., M.F.N. Imports in 1964, all of which came from Japan and the United States, were valued at \$345,732.

Existing Item 403(b)

403 Wire, of steel:-

- (b) Flat or woven flat, including steel strip, in the coil, coated or not, .064 inch in thickness or thinner, with tolerance not to exceed .002 inch, when imported by manufacturers of corset clasps, steels, wires and dress stays for use exclusively in the manufacture of corset clasps, steels, wires and dress stays, in their own factories

Free

5 p.c.

5 p.c.

On the deletion of this item the products now entered under it would be classified according to their nature rather than their end use. Some of the products would probably be classed as steel strip rather than as wire. Most of the wire would probably be encompassed by Recommended Item II(c) at 5 p.c., B.P. and 10 p.c., M.F.N. or, if conjoined, under Recommended Item III(c) at 10 p.c., B.P. and 15 p.c., M.F.N. Imports entered under tariff item 403(b) have averaged about \$100,000 annually.

Existing Item 403(c)

403 Wire, of steel:-

- (c) Valued at not less than two and three-quarter cents per pound for use in the manufacture of wire rope

Free

5 p.c.

$7\frac{1}{2}$  p.c.

The greater part of the imports under this end use item consists of round, uncoated wire. In addition, several thousands of tons of galvanized wire, and smaller quantities of shaped wire, are entered under the item. Round, uncoated wire is provided for in Recommended Item II(a) at  $2\frac{1}{2}$  p.c., B.P. and  $7\frac{1}{2}$  p.c., M.F.N. Shaped and coated wires are provided for in Recommended Items II(b) and II(c) at 5 p.c., B.P. and 10 p.c., M.F.N. Imports entered under tariff item 403(c) were valued at \$5.8 million in 1964, of which \$3.6 million came from Britain.

Existing Item 403(d)

403 Wire, of steel:-

- (d) Single, not covered, in coils, for use exclusively in trolling in bona fide deep sea or inland commercial fishing operations

Free

$7\frac{1}{2}$  p.c.

10 p.c.



As with other end use items the Board recommends the deletion of this item. On its deletion, wire now entered under 403(d) would be dutiable under Recommended Item II(a). This would mean an increase from Free to  $2\frac{1}{2}$  p.c. in the British Preferential Tariff and no change in the Most-Favoured-Nation Tariff.

Existing Item 403(e)

403 Wire, of steel:-

(e) Steel wire, coated or not, when imported by manufacturers of machine card clothing for use exclusively in the manufacture of machine card clothing, in their own factories

Free

Free

Free

On the deletion of this end use item the wire now entered under it, which is shaped, would be provided for in Recommended Item II(b) at 5 p.c., B.P. and 10 p.c., M.F.N. In 1958, the last year for which separate records were kept, imports under tariff item 403(e) were valued at \$2,399.

Existing Item 403(f)

403 Wire, of steel:-

(f) Wire, of rust or acid resisting steel, twisted or stranded, for use exclusively in commercial fishing operations

Free

10 p.c.

25 p.c.

As with other end use items, the Board has recommended the deletion of tariff item 403(f). Any wire which may now be entered under it is provided for in Recommended Item III(c) at 10 p.c., B.P. and 15 p.c., M.F.N.

Although inquiries were made, the Board did not discover anyone making use of tariff item 403(f).

Existing Item 403(g)

403 Wire, of steel:-

(g) Wire rope or cable, coated or not, for use exclusively in commercial fishing operations

Free

10 p.c.

25 p.c.

On the deletion of this end use item the rope or cable now entered under it would be classified under Recommended Item III(c) at 10 p.c., B.P. and 15 p.c., M.F.N. Imports under the item, mainly from Britain, were valued at \$673,687 in 1964.

Existing Item 403(h)

403 Wire, of steel:-

- (h) Spring steel music wire, coated or not, having a tensile strength of not less than two hundred and thirty thousand pounds per square inch, for the manufacture of mechanical springs

12½ p.c.

12½ p.c.

30 p.c.

On the deletion of this item, the wire now entered thereunder would, if round and uncoated, be classified under Recommended Item II(a) at 2½ p.c., B.P. and 7½ p.c., M.F.N. Otherwise it would be dutiable at 5 p.c., B.P. and 10 p.c., M.F.N. under Recommended Item II(b) or II(c).

Imports under tariff item 403(h) are believed to be between \$100,000 and \$200,000 annually.

Existing Item 409e(3)

409e(3) Binder twine; wire and twine for baling farm produce

Free

Free

Free

The Board has recommended the deletion of this item in so far as it refers to wire for baling farm produce. On the implementation of this recommendation, baling wire not processed beyond the stage of wire would be dutiable under Recommended Item II(a) at 2½ p.c., B.P. and 7½ p.c., M.F.N.

The Board understands that some wire, looped or otherwise processed beyond the stage of wire, may be permitted entry under item 409e(3); if this is so, with the deletion of the provision for wire for baling farm produce, such looped or processed wire may be classified under tariff item 446a as manufactures of iron or steel at 10 p.c., B.P. and 22½ p.c., M.F.N. As with other end-use items, the Board is recommending deletion of this provision for wire in view of the lower rates recommended for all wire of iron or steel.

Existing Item 411a

411a Machinery, logging cars, cranes, blocks and tackle, wire rope, but not including wire rope to be used for guy ropes or in braking logs going down grade, and complete parts of all the foregoing, for use exclusively in the operation of logging, such operation to include the removal of the log from stump to skidway, log dump, or common or other carrier

10 p.c.

12½ p.c.

20 p.c.

The Board is recommending the deletion of this item in so far as it relates to wire rope. On the deletion of this item the rope now entered under it would become dutiable at 10 p.c., B.P. and 15 p.c., M.F.N. under Recommended Item III(c). This recommendation is in line with other recommendations for the deletion of end use items. The item was not directly referred to the Board but is considered to be related to the inquiry.

Imports of wire rope under tariff item 411a were valued at \$758,994 in 1964.

Existing Item 440e

440e Wire rope for use exclusively for rigging of ships and vessels, under regulations prescribed by the Minister

Free

Free

Free

This item was not directly referred to the Board but the Board is recommending the deletion of all end use items pertaining to wire rope so that the domestic industry may have the same tariff protection on all its sales in the Canadian market. On the deletion of this item wire rope for rigging ships would be dutiable at 10 p.c. British preferential and 15 p.c., most-favoured-nation under Recommended Item III(c).

Imports entered under tariff item 440e are understood to have been small, although statistics are not available.

Existing Item 446m

446m Welding rods or welding wires of rust, acid or heat resisting steel, whether or not flux-coated

10 p.c.

15 p.c.

35 p.c.

The Board is recommending that this item be continued with no change.

Existing Item 456

456 Wire of brass, zinc, iron or steel, screwed, twisted, flattened or corrugated, for use exclusively in connection with nailing machines for the manufacture of boots and shoes, in boot and shoe factories, under regulations prescribed by the Minister

Free

Free

Free

The Board is recommending the deletion of this item. No representations in favour of its retention were made, and imports, if any, are small.



On its deletion the wire specified in it would be dutiable according to nature of material and degree of processing.

Existing Item 491(1)

491 Machinery and apparatus for use in exploratory or discovery work in connection with oil or natural gas wells or for the development, maintenance, testing, depletion or production of such wells up to and including the wellhead assembly or surface oil pumping unit; well-drilling machinery and apparatus for use in the exploration, discovery, development or operation of potash or rock salt deposits; these provisions shall not include automotive vehicles or chassis on which the machinery and apparatus are mounted:

(1) Wire rope;

5 p.c.

10 p.c.

20 p.c.

This item was not directly included in the Reference and was placed in the Tariff on recommendations of the Board in Reference 130, Volume I. At that time the Board recommended this special provision for wire rope largely because the rates on wire rope seemed unduly high; however, the rates now recommended for wire rope are such that the Board believes that all wire rope, regardless of end use, should be dutiable at the recommended rates.

On the deletion of the words "Wire rope" from item 491(1), wire rope for the purposes outlined would be dutiable under the general item for wire rope, Recommended Item III(c), at 10 p.c., B.P. and 15 p.c., M.F.N.

Existing Item 596a

596a Steel music wire for use in the manufacture of piano strings

10 p.c.

10 p.c.

30 p.c.

The Board recommends the deletion of this temporary end use item. The wire now entered under it would be classified under Recommended Item II(a) at  $2\frac{1}{2}$  p.c. and  $7\frac{1}{2}$  p.c. The Canadian market for the wire specified in tariff item 596a is estimated at about \$25,000 annually.









APPENDIX IIMPORT AND EXPORT STATISTICS

<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
1	Welding rods and welding wires, of all kinds	350, 446m
2	Insect wire screening	351b, 402a, ex 402a
3	Wire cloth or woven wire screening, n.o.p.	351b, 402a, ex 402a
4	Wire rods, steel, hot rolled	379(c), 379(d)
5	Wire of iron or steel: barbed fencing coated or not	401(a)
6	Wire of iron or steel, twisted, braided or stranded, including wire rope or cable, coated or not, n.o.p.	401(b)
7	Wire, twisted, braided or stranded, including wire rope or cable, coated or not, used or second-hand	401(b)
8	Wire strand, including twisted and braided	401(b), 401(f), 403(f)
9	Wire of iron or steel, drawn flat or cold rolled flat after drawing, coated or not, n.o.p. not more than .25 inch in width and less than .1875 inch in thickness	401(c)
10	Wire of iron or steel, coated with zinc or spelter (galvanized)	401(d), 401(e), 402c 402d, 402e, 402f
11	Wire of iron or steel, single or several, coated or covered with any material, including cable so covered n.o.p.	401(f)
12	Wire of iron and steel n.o.p.	401(g), 402h, 403(e), 403(h), 409e(3), 596a
13	Woven or welded wire fencing of iron or steel, coated or not, from wire not more than .144 inches and not less than .004 inches; wire fencing of iron or steel, n.o.p.	403

<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
14	Woven or welded wire fencing of iron or steel, n.o.p.	402a, ex 402a
15	Wire cloth or screen, of iron or steel	402a, ex 402a
16	Wire netting of iron or steel, n.o.p.	402a, ex 402a
17	Wire netting of iron or steel, for use on fur farms	402b(1), 402b(2), 402g
18	Wire, coated with zinc or spelter, for barbed fencing or wire fencing	402c, 402d
19	Wire, spring of steel, for mattresses, cushions or upholstery	403a(1), 403a(2)
20	Wire of steel, flat or woven flat, including steel strip in the coil, coated or not, .064 inches in thickness or thinner, with tolerance not to exceed .002 inches, for the manufacture of corset clasps, steels, wires and dress stays	403(b)
21	Wire of steel, valued at not less than $2\frac{3}{4}$ cents per pound, for the manufacture of wire rope	403(c)
22	Wire rope, or cable, steel, coated or not, and wire, steel, single, not covered, in coils, for trolling in bona fide, deep sea or inland commercial fishing operations	403(d), 403(f), 403(g)
23	Wire, steel, for the manufacture of machine card clothing	403(e)
24	Wire of rust or acid resisting steel, twisted or stranded, for commercial fishing operations	403(f)
25	Wire of brass, zinc, iron or steel, screwed, twisted, flattened or corrugated, for use in connection with nailing machines for the manufacture of boots and shoes	456

#### Exports

26	Wire rods, steel, hot rolled
27	Wire, galvanized



<u>Table</u>	<u>Exports</u>	<u>Tariff Item</u>
28	Wire rope, twisted wire, and multiple wire strand	
29	Wire n.e.s.	
30	Insect wire screening, steel	
31	Insect wire screening n.e.s.	
32	Wire fencing, screening and netting n.e.s.	
33	Welding wire, rods, electrodes and solders	
34	Wire, barbed, of iron and steel	
35	Wire, screen of iron	
36	Woven wire fencing of iron and steel	
37	Wire of iron and steel, n.o.p.	
38	Wire screen, n.o.p. (except copper and iron)	

Preliminary statistics of imports for the full year 1964 became available just as this Report was going to press, and they have been added to the tables.

---

Source: D.B.S., Trade of Canada

Table 1

Imports: Welding rods and welding wires, of all kinds, s.c. 5200

Tariff Items 350, 446a, 446m and 711

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1947	95,214	1,393,294	14.63	291,054	21.3
1948	87,164	1,238,444	14.21	233,529	19.4
1949	71,410	1,093,826	15.32	204,858	19.3
1950	62,495	1,293,681	20.70	248,610	19.8
1951	89,470	1,802,917	20.15	327,269	19.0
1952	147,386	2,364,323	16.04	414,166	18.4
1953	93,200	2,008,405	21.55	360,402	18.4
1954	92,289	2,154,520	23.35	401,563	18.9
1955	105,771	2,866,471	27.10	511,273	18.2
1956	174,403	4,353,636	24.96	799,426	18.5
1957	145,709	4,055,207	27.83	735,053	18.5
1958(a)	134,321	3,814,637	28.40	698,781	18.6
1959	141,690	4,417,534	31.18	771,895	17.7
1960	117,220	3,768,429	33.85	668,055	17.4
1961	79,504	3,475,517	43.71	586,362	17.3
1962	93,002	3,992,214	42.93	717,292	18.2
1963(b)	103,059	4,369,009	42.39	739,964	17.1
1964	103,228	4,379,000	42.42	..	..
<u>2. United Kingdom</u>					
1947	106	6,186	58.36	417	6.7
1948	13	839	64.54	87	10.7
1949	124	9,073	73.17	1,265	13.9
1950	299	9,471	31.68	938	11.1
1951	1,618	35,054	21.67	3,820	10.9
1952	6,808	110,922	16.29	12,722	11.5
1953	1,655	33,022	19.95	3,816	11.6
1954	1,201	26,836	22.34	3,202	12.0
1955	1,736	27,198	15.67	2,973	10.9
1956	1,108	32,293	29.15	3,795	11.8
1957	1,376	72,051	52.36	5,170	11.7
1958	3,431	87,011	25.36	8,527	10.7
1959	12,228	186,941	15.29	19,110	10.3
1960	16,389	270,518	16.51	27,814	10.3
1961	14,148	216,245	15.28	21,809	10.3
1962	26,700	378,042	14.16	47,604	12.7
1963	31,875	505,696	15.86	57,690	11.5
1964	24,987	492,000	19.69	..	..

Table 1  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>Value</u> <u>\$/cwt.</u>	<u>Collected</u> <u>\$</u>	<u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
<u>3. United States</u>					
1947	95,083	1,386,866	14.59	290,576	21.4
1948	87,137	1,237,319	14.20	233,378	19.4
1949	71,286	1,084,753	15.22	203,593	19.4
1950	62,114	1,283,338	20.66	247,541	19.9
1951	87,614	1,763,888	20.13	322,853	19.2
1952	140,235	2,248,970	16.04	400,473	18.7
1953	91,423	1,973,114	21.58	356,150	18.5
1954	90,925	2,121,442	23.33	397,396	19.0
1955	103,807	2,820,331	27.17	504,251	18.3
1956	172,901	4,289,645	24.81	788,949	18.6
1957	144,091	3,964,411	27.51	726,284	18.6
1958	128,661	3,686,101	28.65	682,687	18.8
1959	118,629	3,999,531	33.71	716,820	18.2
1960	87,628	3,533,338	40.32	615,080	18.0
1961	63,987	3,190,553	49.86	553,439	17.8
1962	63,652	3,512,253	55.18	649,988	18.8
1963	64,976	3,587,769	55.22	635,665	18.0
1964	69,857	3,362,000	48.13	..	..

(a) Prior to July 1, 1958, s.c. 5104

(b) s.c. 5933, s.c. 5935 and s.c. 5937, replacing former s.c. 5200 and including such welding wire as was previously classified under former s.c. 5214 (see table 12)



Table 2

Imports: Insect wire screening, s.c. 5955

Tariff Items 351b, 402a, ex 402a and 354

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1963 <sup>(a)</sup>	9,722	361,893	37.22	86,450	23.9
1964	3,451	167,000	48.39	..	..
<u>2. Japan</u>					
1963	7,227	181,079	25.06	44,358	24.5
1964	698	18,000	25.79	..	..
<u>3. United States</u>					
1963	2,338	176,808	75.62	41,179	23.3
1964	2,430	142,000	58.44	..	..

Table 3

Imports: Wire cloth or woven wire screening, n.o.p., s.c. 5957

Tariff Items 351b, 402a, ex 402a and 354, 446a and 711

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1963 <sup>(a)</sup>	8,321	695,141	83.54	156,504	23.0
1964	11,378	782,000	68.73	..	..
<u>2. United Kingdom</u>					
1963	742	72,984	98.36	11,916	16.7
1964	705	86,000	121.99	..	..
<u>3. Germany</u>					
1963	407	80,422	197.60	18,907	24.3
1964	169	46,000	272.19	..	..
<u>4. United States</u>					
1963	6,375	506,188	79.40	117,461	23.5
1964	7,975	560,000	70.22	..	..

<sup>(a)</sup> Not available separately prior to 1963

Table 4

Imports: Wire rods, steel, hot rolled, s.c. 5079

Tariff Items 379(c), 379(d) and 379

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	30,432	127,547	4.19	7,608	6.0
1948	17,378	80,823	4.65	4,345	5.4
1949	158,236	597,931	3.78	39,559	6.6
1950	70,263	261,814	3.73	16,022	6.1
1951	166,449	1,000,842	6.01	40,451	4.0
1952	103,941	616,370	5.93	25,369	4.1
1953	200,286	1,001,836	5.00	44,280	4.4
1954	173,323	721,746	4.16	33,157	4.6
1955	133,650	672,679	5.03	28,820	4.3
1956	284,397	1,556,828	5.47	66,128	4.2
1957	216,674	1,234,055	5.70	51,511	4.2
1958 <sup>(a)</sup>	1,057,662	5,560,345	5.26	120,808	3.0
1959	610,370	3,048,914	5.00	107,445	3.8
1960	325,629	1,792,748	5.51	52,268	3.3
1961	769,285	4,065,302	5.28	114,270	3.1
1962	1,398,785	6,661,547	4.76	302,614	5.0
1963	1,514,807	7,147,537	4.72	242,431	4.1
1964	2,348,027	11,304,000	4.81	..	..
<u>2. United Kingdom</u>					
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	11,226	40,278	3.59	1,263	3.1
1951	8,446	30,380	3.60	950	3.1
1952	4,478	18,935	4.23	504	2.7
1953	42,119	187,144	4.44	4,738	2.5
1954	74,019	308,954	4.17	8,328	2.7
1955	33,365	148,353	4.45	3,754	2.5
1956	36,164	177,774	4.92	4,068	2.3
1957	19,332	108,049	5.59	2,175	2.0
1958	304,230	1,569,197	5.16	421	1.9
1959	46,996	260,799	5.55	1,289	5.0
1960	36,546	200,468	5.49	-	-
1961	28,238	160,921	5.70	1,334	5.0
1962	118,177	689,405	5.83	14,128	7.2
1963	132,569	778,532	5.87	6,684	5.0
1964	176,586	1,023,000	5.79	..	..

Table 4  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>Value</u>	<u>Collected</u>	<u>p.c. of</u>
			<u>\$/cwt.</u>	<u>\$</u>	<u>Dutiable</u>
					<u>Value</u>
<u>3. Belgium and Luxembourg</u>					
1947-48	-	-	-	-	-
1949	45	2,565	57.00	11	.4
1950	40,692	132,552	3.26	10,173	7.7
1951	56,485	359,101	6.36	14,121	3.9
1952	51,727	335,171	6.48	12,931	3.9
1953	57,515	236,415	4.11	14,379	6.1
1954	22,054	89,448	4.06	5,513	6.2
1955	-	-	-	-	-
1956	103,611	514,085	4.96	25,903	5.0
1957	76,019	402,163	5.29	19,005	4.7
1958	212,153	1,020,673	4.81	36,018	3.5
1959	206,580	936,015	4.53	46,917	5.0
1960	39,563	205,950	5.21	5,936	2.9
1961	182,455	899,541	4.93	31,996	4.3
1962	411,205	1,799,886	4.38	91,576	5.4
1963	398,057	1,681,598	4.22	48,371	3.6
1964	466,309	2,037,000	4.37	..	..

4. France

1947-49	-	-	-	-	-
1950	1,995	6,126	3.07	499	8.1
1951	42,650	230,261	5.40	10,663	4.6
1952-57	-	-	-	-	-
1958	171,519	772,480	4.50	25,575	3.3
1959	175,575	861,864	4.91	26,338	3.1
1960	95,095	532,252	5.60	14,264	2.7
1961	283,392	1,558,213	5.50	41,218	2.7
1962	508,790	2,418,504	4.75	125,517	5.2
1963	460,494	2,090,147	4.54	96,546	4.6
1964	744,587	3,389,000	4.55	..	..



Table 4  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
<u>5. Germany</u>					
1947-49	-	-	-	-	-
1950	7,617	27,512	3.61	1,904	6.9
1951	40,231	253,558	6.30	10,058	4.0
1952	7,281	44,498	6.11	1,820	4.1
1953	51,310	202,453	3.95	12,827	6.3
1954	66,855	249,729	3.74	16,717	6.7
1955	82,153	408,801	4.98	20,533	5.0
1956	126,822	681,276	5.37	31,708	4.7
1957	78,479	437,916	5.58	19,620	4.5
1958	164,940	794,628	4.82	26,937	3.4
1959	158,121	776,940	4.91	23,720	3.1
1960	103,188	527,618	5.11	22,577	4.3
1961	208,790	1,052,463	5.04	31,224	3.0
1962	293,537	1,377,584	4.69	59,066	4.3
1963	345,877	1,620,492	4.69	67,800	4.2
1964	582,968	2,703,000	4.64	..	..
<u>6. Japan</u>					
1947-59	-	-	-	-	-
1960	36,623	182,850	4.99	5,495	3.0
1961	44,016	219,288	4.98	16,555	3.0
1962	51,038	267,589	5.24	10,772	4.0
1963	135,000	660,488	4.89	20,837	3.2
1964	152,112	737,000	4.85	..	..
<u>7. United States</u>					
1947	30,432	127,547	4.19	7,608	6.0
1948	17,378	80,823	4.65	4,345	5.4
1949	158,191	595,366	3.76	39,548	6.6
1950	8,733	55,346	6.34	2,183	3.9
1951	14,190	106,110	7.48	3,547	3.3
1952	40,455	217,766	5.38	10,114	4.6
1953	45,873	337,554	7.36	11,469	3.4
1954	10,395	73,615	7.08	2,599	3.5
1955	17,829	112,143	6.29	4,457	4.0
1956	17,800	183,693	10.32	4,449	2.4
1957	37,882	259,102	6.84	9,471	3.7
1958	151,248	1,107,288	7.32	23,387	2.1
1959	23,098	213,296	9.23	9,181	4.3
1960	9,254	115,883	12.52	3,192	2.8
1961	4,748	82,447	17.36	792	1.0
1962	1,921	38,294	19.93	1,382	3.6
1963	2,891	89,696	31.03	1,795	2.0
1964	9,669	165,000	17.06	..	..

(a) Prior to July 1, 1958, s.c. 5103: "Rods, hot rolled, in the coil, not over .375 inch in diameter, for the manufacture of wire"

Table 5

Imports: Wire of iron or steel: barbed fencing coated or not,  
s.c. 5201

Tariff Item 401(a)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1947	746	3,761	5.04	376	10.0
1948	1,232	6,204	5.04	620	10.0
1949	19,703	130,873	6.64	11,664	10.0
1950	3,932	30,538	7.77	252	10.0
1951	7,529	88,842	11.80	5,695	10.0
1952	2,034	14,357	7.06	1,135	10.6
1953	35,554	249,676	7.02	11,865	10.0
1954	39,471	250,585	6.35	18,405	10.0
1955	57,145	410,721	7.19	18,082	10.0
1956	90,091	605,326	6.72	41,435	10.0
1957	87,892	671,083	7.64	18,497	10.0
1958	92,743	705,678	7.61	34,601	10.0
1959	162,602	1,091,872	6.71	81,988	10.0
1960	144,037	1,036,334	7.19	67,006	10.0
1961	128,607	948,043	7.37	61,062	10.0
1962	174,075	1,211,435	6.96	114,139	10.0
1963 (a)	154,107	1,013,449	6.58	94,768	10.0
1964	147,120	983,000	6.68	..	..
<u>2. United Kingdom</u>					
1947-48	-	-	-	-	-
1949	1,330	14,232	10.70	-	-
1950	3,425	28,018	8.18	-	-
1951	3,442	31,895	9.27	-	-
1952	410	3,624	8.84	-	-
1953	16,600	131,029	7.89	-	-
1954	9,199	66,540	7.23	-	-
1955	29,930	229,897	7.68	-	-
1956	24,549	190,978	7.78	-	-
1957	59,919	486,117	8.11	-	-
1958	39,322	359,664	9.15	-	-
1959	33,619	272,094	8.09	-	-
1960	45,729	371,255	8.12	488	10.0
1961	38,600	337,439	8.74	-	-
1962	7,723	73,624	9.53	375	10.0
1963	7,717	73,409	9.51	722	10.0
1964	4,978	59,000	11.85	..	..

Table 5  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>3. Austria</u>					
1947-55	-	-	-	-	-
1956	118	1,169	9.91	117	10.0
1957-58	-	-	-	-	-
1959	9,094	58,438	6.43	5,844	10.0
1960	22,733	151,440	6.66	15,153	10.0
1961	22,950	146,320	6.38	14,634	10.0
1962	19,791	130,198	6.58	13,022	10.0
1963	11,446	77,611	6.78	7,763	10.0
1964	10,000	67,000	6.70	..	..
<u>4. Belgium and Luxembourg</u>					
1947-52	-	-	-	-	-
1953	2,825	16,089	5.70	1,609	10.0
1954	16,000	93,432	5.84	9,343	10.0
1955	16,364	101,849	6.22	10,185	10.0
1956	19,559	128,525	6.57	12,853	10.0
1957	8,535	57,544	6.74	5,755	10.0
1958	9,743	63,520	6.52	6,352	10.0
1959	17,175	104,100	6.06	10,410	10.0
1960	11,982	86,799	7.24	8,681	10.0
1961	10,880	77,309	7.11	7,730	10.0
1962	34,988	238,499	6.82	23,853	10.0
1963	23,621	166,466	7.05	16,646	10.0
1964	38,676	261,000	6.75	..	..
<u>5. France</u>					
1947-55	-	-	-	-	-
1956	2,314	14,407	6.23	1,441	10.0
1957	1,540	9,384	6.09	938	10.0
1958	13,352	83,783	6.27	8,378	10.0
1959	1,925	13,875	7.21	1,388	10.0
1960	-	-	-	-	-
1961	3,852	28,091	7.29	2,809	10.0
1962	11,906	83,336	7.00	8,334	10.0
1963	2,656	17,874	6.73	1,788	10.0
1964	3,973	27,000	6.80	..	..



Table 5  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
6. Germany <sup>(b)</sup>					
1947-50	-	-	-	-	-
1951	420	2,356	5.61	236	10.0
1952	-	-	-	-	-
1953	8,865	51,143	5.77	5,114	10.0
1954	7,966	46,238	5.80	4,624	10.0
1955	6,112	38,992	6.38	3,899	10.0
1956	42,623	264,372	6.20	26,437	10.0
1957	17,603	116,188	6.60	11,619	10.0
1958	14,348	99,652	6.95	9,963	10.0
1959	35,115	247,522	7.05	24,757	10.0
1960	12,048	92,636	7.69	9,264	10.0
1961	8,831	70,108	7.94	7,012	10.0
1962	19,486	157,402	8.08	15,714	10.0
1963	20,797	160,938	7.74	16,085	10.0
1964	7,248	63,000	8.69	..	..
7. Netherlands					
1947-55	-	-	-	-	-
1956	668	4,263	6.38	426	10.0
1957	-	-	-	-	-
1958	3,541	22,647	6.40	2,265	10.0
1959	3,393	21,723	6.40	2,172	10.0
1960	2,083	14,609	7.01	1,461	10.0
1961	2,782	20,491	7.37	2,049	10.0
1962	17,220	118,944	6.91	11,904	10.0
1963	3,090	21,285	6.89	2,191	10.3
1964	1,189	8,000	6.73	..	..
8. Japan					
1947-53	-	-	-	-	-
1954	485	3,156	6.51	316	10.0
1955-56	-	-	-	-	-
1957	21	127	6.05	13	10.0
1958	11,076	67,266	6.07	6,727	10.0
1959	61,689	368,869	5.98	36,887	10.0
1960	48,896	314,786	6.44	31,478	10.0
1961	40,429	264,578	6.54	26,458	10.0
1962	62,577	405,125	6.47	40,505	10.0
1963	84,545	491,938	5.82	49,064	10.0
1964	80,791	494,000	6.11	..	..

Table 5  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
9. United States					
1947	746	3,761	5.04	376	10.0
1948	1,232	6,204	5.04	620	10.0
1949	18,373	116,641	6.35	11,664	10.0
1950	507	2,520	4.97	252	10.0
1951	3,667	54,591	14.89	5,459	10.0
1952	1,624	10,733	6.61	1,133	10.6
1953	7,264	51,415	7.08	5,142	10.0
1954	5,821	41,219	7.08	4,122	10.0
1955	4,739	39,983	8.44	3,998	10.0
1956	260	1,612	6.20	161	10.0
1957	274	1,723	6.29	172	10.0
1958	1,361	9,146	6.72	914	10.0
1959	592	5,251	8.87	531	10.1
1960	566	4,809	8.50	481	10.0
1961	283	3,707	13.10	370	10.0
1962	384	4,307	11.22	432	10.0
1963	235	3,928	16.71	509	13.0
1964	265	4,000	15.09	..	..

(a) s.c. 5911 after 1962

(b) Beginning in 1952, West Germany only

Table 6

Imports: Wire of iron or steel, twisted, braided or stranded,  
including wire rope or cable, coated or not, n.o.p.,  
s.c. 5207

Tariff Item 401(b)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
<u>1. Total</u>					
1947	24,896	270,681	10.87	55,821	20.6
1948	29,758	318,857	10.72	74,788	23.5
1949	36,953	529,156	14.32	113,389	21.5
1950	60,989	952,458	15.62	193,067	20.3
1951	88,251	1,472,511	16.69	302,348	20.6
1952	85,273	1,535,507	18.01	316,372	20.8
1953	84,722	1,343,411	15.86	287,817	21.5
1954	105,436	1,723,111	16.34	357,697	21.0
1955	136,445	2,165,886	15.87	466,382	21.8
1956(a)	86,479	1,917,989	22.18	409,603	21.7
1957	90,089	1,963,515	21.80	391,268	20.9
1958	94,338	2,100,409	22.26	373,422	20.5
1959	103,825	2,354,164	22.67	366,599	20.3
1960	100,910	2,062,143	20.44	408,651	20.4
1961	115,441	2,398,033	20.77	488,917	20.9
1962	112,366	2,559,864	22.78	514,559	20.8
1963(b)	64,896	1,589,387	24.49	310,864	19.9
1964	90,613	2,070,000	22.84	..	..
<u>2. United Kingdom</u>					
1947	3,971	67,712	17.05	5,079	7.5
1948	2,726	48,724	17.87	7,254	14.9
1949	14,834	186,671	12.58	27,861	15.0
1950	25,182	449,567	17.85	67,344	15.0
1951	31,244	654,347	20.94	97,981	15.0
1952	29,050	648,412	22.32	96,828	15.0
1953	20,486	473,279	23.10	70,576	15.0
1954	36,695	678,006	18.48	101,665	15.0
1955	34,492	694,406	20.13	103,855	15.0
1956	30,588	624,978	20.43	93,752	15.0
1957	40,544	773,132	19.07	115,945	15.0
1958	38,462	810,273	21.07	121,542	15.0
1959	42,239	841,942	19.93	125,924	15.0
1960	42,076	899,488	21.38	135,075	15.0
1961	41,218	937,060	22.73	139,671	14.9
1962	38,063	959,025	25.20	138,916	14.5
1963	26,248	726,270	27.67	104,202	14.5
1964	38,962	1,064,000	27.31	..	..



Table 6  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
<u>3. Germany</u> <sup>(c)</sup>					
1947-49	-	-	-	-	-
1950	776	9,143	11.78	2,286	25.0
1951	1,531	30,515	19.93	7,629	25.0
1952	4,594	75,375	16.41	18,844	25.0
1953	5,845	103,896	17.78	25,974	25.0
1954	16,627	205,389	12.35	51,264	25.0
1955	21,800	312,924	14.35	78,231	25.0
1956	13,405	223,492	16.67	55,873	25.0
1957	19,469	320,476	16.46	79,981	25.0
1958	18,421	310,594	16.86	77,589	25.0
1959	16,245	267,543	16.47	66,795	25.0
1960	11,230	197,896	17.62	49,370	24.9
1961	12,965	240,916	18.58	60,181	25.0
1962	11,185	220,321	19.70	52,344	24.5
1963	9,214	182,425	19.80	43,523	24.6
1964	9,495	209,000	22.01	..	..
<u>4. Netherlands</u>					
1947-49	-	-	-	-	-
1950	311	4,869	15.66	1,217	25.0
1951	373	8,493	22.77	2,123	25.0
1952	1,307	26,787	20.50	6,394	25.0
1953	2,753	42,290	15.36	10,573	25.0
1954	5,155	75,236	14.59	18,809	25.0
1955	9,860	151,715	15.39	37,756	25.0
1956	8,750	144,934	16.56	35,637	25.0
1957	7,867	138,182	17.56	33,965	25.0
1958	18,240	270,195	14.81	67,269	25.0
1959	17,314	273,104	15.77	68,276	25.0
1960	15,127	254,938	16.85	62,420	24.6
1961	14,207	248,520	17.49	61,392	24.8
1962	14,982	287,400	19.18	70,010	24.4
1963	9,437	173,307	18.36	41,860	24.5
1964	10,942	223,000	20.38	..	..

Table 6  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
5. Japan					
1947-54	-	-	-	-	-
1955	546	9,729	17.82	2,432	25.0
1956	777	11,661	15.01	2,915	25.0
1957	1,218	13,134	10.78	3,283	25.0
1958	2,438	26,747	10.97	6,687	25.0
1959	4,628	64,704	13.98	15,471	23.9
1960	7,344	86,509	11.78	21,137	24.4
1961	21,948	248,272	11.31	61,727	25.0
1962	16,714	200,067	11.97	49,020	24.8
1963	1,958	27,325	13.96	5,458	20.0
1964	3,444	51,000	14.81	..	..
6. United States					
1947	20,922	202,808	9.69	50,702	25.0
1948	26,682	267,192	10.01	66,798	25.0
1949	22,098	341,679	15.46	85,327	25.0
1950	34,698	488,541	14.08	122,136	25.0
1951	54,921	775,079	14.11	193,596	25.0
1952	49,570	773,662	15.61	191,488	25.0
1953	52,804	684,562	12.96	170,848	25.0
1954	44,436	731,165	16.45	177,631	25.0
1955	66,537	950,766	14.29	232,520	25.0
1956	27,390	839,556	30.65	203,084	25.0
1957	15,786	637,157	40.36	137,896	25.0
1958	12,337	599,517	48.60	79,724	25.0
1959	17,025	811,746	47.68	67,369	24.9
1960	6,256	372,966	59.62	79,302	25.0
1961	6,537	452,625	69.24	98,865	25.0
1962	8,239	479,627	58.21	102,140	25.0
1963	10,047	316,037	31.46	75,398	24.8
1964	19,444	346,000	17.79	..	..

(a) Includes s.c. 5213 prior to 1956 (see table 21)

(b) s.c. 5929; includes wire rope previously covered by former s.c. 5207, s.c. 5205, s.c. 5206, s.c. 5213 and s.c. 5223 (see tables 7 and 11). Imports other than wire rope previously included in former s.c. 5207 now covered by s.c. 5919 (see table 8)

(c) Beginning in 1952, West Germany only

Table 7

Imports: Wire, twisted, braided or stranded, including wire rope  
or cable, coated or not, used or second-hand, s.c. 5213

Tariff Item 401(b)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1956 <sup>(a)</sup>	37,399	179,762	4.81	44,210	24.6
1957	28,753	111,806	3.89	27,661	24.8
1958	8,267	31,727	3.84	7,474	24.3
1959	14,233	52,827	3.71	12,820	24.3
1960	14,275	55,851	3.91	13,911	24.9
1961	19,032	87,896	4.62	20,155	22.9
1962 <sup>(b)</sup>	18,704	84,135	4.50	22,416	26.6
<u>2. United Kingdom</u>					
1956	842	7,301	8.67	1,095	15.0
1957	1,281	2,618	2.04	393	15.0
1958	151	1,994	13.21	299	15.0
1959	184	1,585	8.61	238	15.0
1960	35	486	13.89	73	15.0
1961	815	12,404	15.22	1,861	15.0
1962	115	725	6.30	108	14.9
<u>3. United States</u>					
1956	36,557	172,461	4.72	43,115	25.0
1957	27,472	109,188	3.97	27,268	25.0
1958	8,116	29,733	3.66	7,175	25.0
1959	14,021	50,836	3.63	12,481	24.6
1960	14,223	55,233	3.88	13,805	25.0
1961	18,029	74,745	4.15	18,107	24.2
1962	18,578	83,250	4.48	22,268	26.7

(a) Included in s.c. 5207 prior to 1956 (see table 6)

(b) Included in s.c. 5919 and s.c. 5929 after 1962 (see tables 6 and 8)



Table 8

Imports: Wire strand, including twisted and braided  
coated or not, s.c. 5919

Tariff Items 401(b), 401(f) and 403(f)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1963 <sup>(a)</sup>	14,011	510,439	36.43	102,199	22.1
1964	22,541	552,000	24.49	..	..
<u>2. United Kingdom</u>					
1963	4,489	94,555	21.06	14,183	15.0
1964	5,717	102,000	17.84	..	..
<u>3. Belgium and Luxembourg</u>					
1963	1,572	27,996	17.81	6,612	23.6
1964	1,992	39,000	19.58	..	..
<u>4. Germany</u>					
1963	314	8,678	27.64	2,110	24.3
1964	4,568	76,000	16.64	..	..
<u>5. Netherlands</u>					
1963	1,869	34,284	18.34	8,338	24.3
1964	2,153	34,000	15.79	..	..
<u>6. Japan</u>					
1963	1,746	18,281	10.47	4,571	25.0
1964	3,971	41,000	10.32	..	..
<u>7. United States</u>					
1963	3,988	324,875	81.46	65,948	23.7
1964	3,210	252,000	78.50	..	..

(a) Not available separately prior to 1963

Table 9

Imports: Wire of iron or steel, drawn flat or cold rolled flat  
after drawing, coated or not, n.o.p., not more than  
.25 inch in width and less than .1875 inch in thickness,  
s.c. 5203

Tariff Item 401(c)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
1. Total					
1947	3,252	47,595	14.64	9,519	20.0
1948	3,781	56,230	14.87	11,238	20.0
1949	4,343	79,271	18.25	15,855	20.0
1950	3,470	64,664	18.64	12,900	19.9
1951	12,509	229,814	18.37	45,556	19.8
1952	2,943	67,839	23.05	13,368	19.7
1953	7,106	136,099	19.15	27,098	19.9
1954	4,649	89,359	19.22	16,251	18.2
1955	4,614	99,751	21.62	18,130	18.2
1956	8,089	144,029	17.81	25,076	17.5
1957	6,202	100,920	16.27	17,429	17.3
1958	4,355	96,896	22.25	17,951	18.5
1959	5,733	169,043	29.49	31,204	18.5
1960	6,103	177,210	29.04	34,509	19.5
1961	9,689	311,792	32.18	60,511	19.4
1962	7,986	311,713	39.03	60,884	19.5
1963(a)	9,183	386,868	42.13	59,750	16.3
1964	15,277	606,000	39.67	..	..
2. United Kingdom					
1947	-	-	-	-	-
1948	10	67	6.70	5	7.5
1949	-	-	-	-	-
1950	16	262	16.38	20	7.6
1951	149	3,237	21.72	243	7.5
1952	94	1,599	17.01	120	7.5
1953	40	978	24.45	73	7.5
1954	946	12,965	13.71	972	7.5
1955	1,130	14,569	12.89	1,093	7.5
1956	2,099	28,951	13.79	2,171	7.5
1957	1,716	22,043	12.85	1,654	7.5
1958	834	11,424	13.70	857	7.5
1959	1,684	19,304	11.46	1,448	7.5
1960	584	6,859	11.74	515	7.5
1961	759	10,297	13.57	815	7.9
1962	501	11,199	22.35	855	7.6
1963	1,315	35,471	26.97	1,294	8.4
1964	1,157	30,000	25.93	..	..

Table 9  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>3. Belgium and Luxembourg</u>					
1947-56	-	-	-	-	-
1957	101	1,396	13.82	279	20.0
1958	441	2,685	6.09	537	20.0
1959	720	5,873	8.16	1,093	18.6
1960	1,387	24,473	17.64	4,897	20.0
1961	1,036	17,022	16.43	3,402	20.0
1962	1,176	20,594	17.51	3,989	19.4
1963	875	16,581	18.95	3,184	19.2
1964	2,782	45,000	16.18	..	..
<u>4. United States</u>					
1947	3,252	47,595	14.64	9,519	20.0
1948	3,771	56,163	14.89	11,233	20.0
1949	4,343	79,271	18.25	15,855	20.0
1950	3,402	63,487	18.66	12,697	20.0
1951	11,490	213,493	18.58	42,696	20.0
1952	2,796	65,178	23.31	13,036	20.0
1953	6,548	126,873	19.38	25,375	20.0
1954	3,580	74,430	20.79	14,886	20.0
1955	3,484	85,182	24.45	17,037	20.0
1956	5,975	114,827	19.22	22,855	20.0
1957	3,790	73,321	19.35	14,664	20.0
1958	3,062	82,487	26.94	16,497	20.0
1959	3,126	140,292	44.88	28,020	20.0
1960	4,108	145,391	35.39	29,000	19.9
1961	7,727	281,519	36.43	55,703	19.8
1962	5,504	268,637	48.81	53,787	20.0
1963	6,875	330,525	48.08	55,056	16.7
1964	9,689	473,000	48.82	..	..

(a) s.c. 5902; includes former s.c. 5203 and s.c. 5209 (see table 20)



Table 10

Imports: Wire of iron or steel, coated with zinc or spelter  
(galvanized), s.c. 5204

Tariff Items 401(d), 401(e), 402c, 402d, 402e and 402f

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	33,489	227,927	6.81	44,089	19.5
1948	20,451	165,149	8.08	30,613	18.5
1949	22,067	238,743	10.82	37,434	19.6
1950	17,928	297,560	16.60	30,958	18.9
1951	28,832	379,232	13.15	47,633	17.5
1952	30,883	356,588	11.55	50,950	18.4
1953	15,238	246,157	16.15	22,768	17.7
1954 (a)	45,992	475,521	10.34	38,535	16.0
1955	45,409	551,311	12.14	51,190	15.8
1956	50,903	632,599	12.43	59,839	16.6
1957	72,374	827,512	11.43	80,702	15.8
1958 (b)	96,089	1,086,499	11.31	108,237	16.4
1959	163,362	1,598,921	9.79	129,593	16.3
1960	139,227	1,251,352	8.99	65,199	14.3
1961	154,873	1,431,645	9.24	84,591	14.4
1962	145,285	1,352,552	9.31	102,054	15.7
1963 (c)	182,815	1,667,008	9.12	171,297	17.1
1964	179,158	1,646,000	9.19	..	..
<u>2. United Kingdom</u>					
1947	227	1,815	8.00	-	-
1948	-	-	-	-	-
1949	53	1,191	22.47	119	10.0
1950	2,157	18,285	8.48	1,526	10.0
1951	4,646	37,153	8.00	3,693	10.0
1952	2,149	22,043	10.26	2,204	10.0
1953	3,090	27,823	9.00	2,782	10.0
1954	8,917	75,064	8.42	7,305	10.0
1955	14,105	136,063	9.65	12,249	10.0
1956	14,419	132,959	9.22	12,088	10.0
1957	40,253	341,728	8.49	18,297	10.0
1958	48,980	434,459	8.87	16,104	10.0
1959	64,153	554,221	8.64	23,889	10.1
1960	59,800	528,122	8.83	19,146	10.1
1961	67,490	664,622	9.85	23,957	10.0
1962	45,555	462,378	10.15	15,475	9.9
1963	40,170	402,901	10.03	14,748	10.1
1964	48,160	499,000	10.36	..	..

Table 10  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
<u>3. Belgium and Luxembourg</u>					
1947-50	-	-	-	-	-
1951	224	2,121	9.47	424	20.0
1952	762	5,046	6.62	1,009	20.0
1953	44	215	4.89	43	20.0
1954	828	6,033	7.29	1,184	19.6
1955	4,094	27,916	6.82	4,707	16.9
1956	7,480	53,421	7.14	10,409	19.5
1957	6,051	46,668	7.71	9,104	19.5
1958	5,063	32,793	6.48	5,646	17.2
1959	4,499	35,312	7.85	3,818	16.3
1960	12,082	87,733	7.26	7,629	13.7
1961	19,646	120,405	6.13	7,869	15.7
1962	38,237	268,526	7.02	29,863	17.8
1963	53,250	375,506	7.05	42,533	17.6
1964	22,432	162,000	7.22	..	..
<u>4. Germany</u> <sup>(d)</sup>					
1947-51	-	-	-	-	-
1952	1,014	7,852	7.74	1,571	20.0
1953	1,783	13,966	7.83	2,793	20.0
1954	15,212	104,484	6.87	7,358	20.0
1955	3,359	29,146	8.68	5,829	20.0
1956	1,617	16,901	10.45	3,380	20.0
1957	3,088	29,639	9.60	5,338	18.1
1958	9,276	73,889	7.97	5,636	20.0
1959	47,269	325,947	6.90	13,796	20.0
1960	42,757	320,311	7.49	9,964	19.7
1961	25,881	196,832	7.61	11,987	18.4
1962	19,540	151,263	7.74	11,153	17.8
1963	36,319	278,816	7.68	20,180	16.8
1964	18,315	168,000	9.17	..	..
<u>5. Japan</u>					
1947-54	-	-	-	-	-
1955	132	842	6.38	169	20.1
1956	538	2,619	4.87	524	20.0
1957	-	-	-	-	-
1958	5,538	36,222	6.54	503	19.0
1959	18,433	125,226	6.79	2,047	18.4
1960	10,857	78,126	7.20	3,320	17.8
1961	15,217	106,176	6.98	7,080	18.6
1962	19,305	140,185	7.26	8,433	16.6
1963	31,001	248,328	8.01	34,100	19.5
1964	57,669	409,000	7.09	..	..

Table 10  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>Value</u>	<u>Collected</u>	<u>p.c. of</u>
			<u>\$/cwt.</u>	<u>\$</u>	<u>Dutiable</u>
					<u>Value</u>
<u>6. United States</u>					
1947	33,262	226,112	6.80	44,089	19.5
1948	20,451	165,149	8.08	30,613	18.5
1949	22,014	237,552	10.79	37,315	19.6
1950	15,771	279,275	17.71	29,432	19.8
1951	23,962	339,958	14.19	43,516	18.7
1952	25,959	314,062	12.10	44,649	19.1
1953	10,321	204,153	19.78	17,150	19.7
1954	20,061	283,655	14.14	21,877	18.4
1955	22,161	343,630	15.51	25,493	19.6
1956	26,849	426,699	15.89	33,438	20.0
1957	21,400	398,815	18.64	46,097	19.0
1958	24,427	492,386	20.16	78,107	18.7
1959	25,045	531,882	21.24	83,269	19.0
1960	7,545	192,917	25.57	21,955	18.6
1961	9,508	208,965	21.98	22,672	19.9
1962	6,846	219,991	32.13	24,930	20.1
1963	8,607	271,677	31.56	49,103	19.9
1964	11,736	264,000	22.49	..	..

(a) Includes former s.c. 5213 after 1953 (see table 18)

(b) (Galvanized) was added January 1, 1958

(c) s.c. 5907; includes former s.c. 5204 except for tariff item 402e now included in s.c. 5714

(d) Beginning in 1952, West Germany only



Table 11

Imports: Wire of iron or steel, single or several, coated or covered with any material, including cable so covered n.o.p., s.c. 5205

Tariff item 401(f)

Year	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1947	6,933	160,967	23.22	47,976	29.8
1948	6,779	151,942	22.41	44,784	29.5
1949	7,441	115,621	15.54	33,135	28.7
1950	6,345	136,762	21.55	39,248	28.7
1951	10,950	229,645	20.97	60,873	26.5
1952	11,590	315,039	27.18	77,088	24.5
1953	11,914	310,112	26.03	73,943	23.8
1954	7,097	194,974	27.47	45,961	23.8
1955	10,400	315,077	30.30	76,433	24.3
1956	11,496	381,349	33.17	91,469	24.0
1957(a)	11,353	399,901	35.22	90,593	22.9
1958	15,083	443,672	29.42	99,267	22.7
1959	11,186	363,599	32.50	87,362	24.0
1960	10,995	331,904	30.19	79,236	24.2
1961	13,797	478,091	34.65	113,270	23.8
1962	13,307	510,574	38.37	127,698	25.2
1963(b)	17,964	573,676	31.93	130,109	23.0
1964	25,230	734,000	29.09	..	..
<u>2. United Kingdom</u>					
1947	79	1,398	17.70	105	7.5
1948	374	5,318	14.22	798	15.0
1949	570	10,345	18.15	1,552	15.0
1950	428	11,873	27.74	1,781	15.0
1951	851	17,311	20.34	2,596	15.0
1952	593	16,721	28.20	2,508	15.0
1953	2,010	36,048	17.93	5,407	15.0
1954	1,292	23,622	18.28	3,543	15.0
1955	982	23,356	23.78	3,503	15.0
1956	1,200	36,849	30.71	5,527	15.0
1957	2,847	84,131	29.55	12,620	15.0
1958	4,385	98,961	22.57	14,844	15.0
1959	1,619	31,419	19.41	4,710	15.0
1960	888	25,792	29.05	3,865	15.0
1961	2,068	54,489	26.35	8,171	15.1
1962	3,487	87,315	25.04	14,285	16.6
1963	2,800	78,324	27.97	10,315	13.4
1964	4,648	133,000	28.61	..	..

Table 11  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>3. Germany(c)</u>					
1947-52	-	-	-	-	-
1953	38	411	10.82	103	25.1
1954	255	4,194	16.45	1,049	25.0
1955	482	8,388	17.40	2,097	25.0
1956	253	3,616	14.29	904	25.0
1957	1,340	19,984	14.91	4,902	25.0
1958	1,327	21,772	16.41	4,947	25.0
1959	1,435	23,496	16.37	5,874	25.0
1960	642	16,801	26.17	4,193	25.0
1961	395	11,502	29.12	2,877	25.0
1962	129	2,770	21.47	749	27.0
1963	299	5,406	18.08	1,303	24.1
1964	294	9,000	30.61	..	..
<u>4. United States</u>					
1947	6,854	159,569	23.28	47,871	30.0
1948	6,405	146,624	22.89	43,986	30.0
1949	6,871	105,276	15.32	31,583	30.0
1950	5,900	124,562	21.11	37,369	30.0
1951	10,099	212,334	21.03	58,277	27.4
1952	10,997	298,318	27.13	74,580	25.0
1953	9,854	273,250	27.73	68,312	25.0
1954	5,235	163,971	31.32	40,568	25.0
1955	8,779	281,629	32.08	70,407	25.0
1956	9,833	338,261	34.40	84,382	25.0
1957	6,951	292,147	42.03	72,162	25.0
1958	8,300	313,151	37.73	77,028	25.0
1959	7,736	301,875	39.02	75,030	24.9
1960	9,112	283,858	31.15	69,814	25.0
1961	9,960	389,387	39.10	96,523	25.0
1962	8,893	406,908	45.76	109,173	26.9
1963	13,612	452,653	33.25	110,229	24.7
1964	16,638	497,000	29.87	..	..

(a) In 1957 s.c. 5205 was: wire of iron or steel, single or several, coated, n.o.p., covered with any material, including cable so covered

(b) s.c. 5909; includes imports of wire previously covered by former s.c. 5205 and imports of wire under tariff items 403e and 403h previously covered by former s.c. 5214 (see table 12)  
Imports other than wire previously included in former s.c. 5205 now covered by s.c. 5919 and 5929 (see tables 6 and 8)

(c) Beginning in 1952, West Germany only

Table 12

Imports: Wire of iron and steel, n.o.p., s.c. 5214

Tariff items 401(g), 402h, 403(e), 403(h), 409e (3), 596a and 438q

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	200,853	1,630,842	8.12	321,521	20.0
1948	268,104	2,110,746	7.87	314,244	15.1
1949	234,392	1,821,655	7.77	267,317	15.0
1950	92,086	1,397,711	15.18	208,360	15.0
1951	253,107	3,048,929	12.05	412,812	15.0
1952	223,171	2,048,194	9.18	267,901	15.0
1953	137,135	1,524,849	11.12	219,806	15.0
1954	99,196	1,274,365	12.85	163,456	15.0
1955	199,683	2,635,359	13.20	368,294	14.9
1956	271,259	3,336,531	12.30	474,835	14.7
1957	163,045	2,315,936	14.20	317,348	14.6
1958	233,649	3,032,670	12.98	423,508	14.6
1959(a)	195,056	2,601,509	13.34	346,766	14.2
1960	154,993	2,238,228	14.44	298,277	14.0
1961	191,068	2,540,613	13.30	316,441	13.5
1962	215,686	2,659,618	12.33	381,435	15.4
1963(b)	147,797	2,604,255	17.62	319,677	13.0
1964	342,139	4,613,000	13.48	..	..
<u>2. United Kingdom</u>					
1947	396	4,856	12.26	364	7.5
1948	149	1,993	13.38	299	15.0
1949	287	5,930	20.66	889	15.0
1950	1,948	24,082	12.36	3,585	15.0
1951	8,959	142,512	15.91	21,347	15.0
1952	3,589	66,059	18.41	9,788	15.0
1953	5,833	83,163	14.26	12,412	15.0
1954	12,960	158,371	12.22	23,077	15.0
1955	10,026	141,554	14.12	20,972	15.0
1956	12,833	179,854	14.01	25,769	14.6
1957	44,338	390,923	8.22	54,795	14.8
1958	38,657	409,067	10.58	55,842	14.5
1959	53,628	607,909	11.34	82,724	14.4
1960	47,811	567,897	11.88	77,689	14.2
1961	43,019	602,814	14.01	77,597	14.2
1962	21,733	439,178	20.21	70,070	16.0
1963	27,776	512,147	18.44	67,895	13.6
1964	23,983	418,000	17.43	..	..



Table 12  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>Value</u>	<u>Collected</u>	<u>p.c. of</u>
			<u>\$/cwt.</u>	<u>\$</u>	<u>Dutiable</u>
					<u>Value</u>
<u>3. Belgium and Luxembourg</u>					
1947-50	-	-	-	-	-
1951	11,267	95,378	8.47	13,515	15.0
1952	11,427	101,119	8.85	13,174	15.0
1953	1,944	19,819	10.19	2,415	15.0
1954	9,852	63,583	6.45	8,192	15.0
1955	7,707	60,034	7.79	7,889	15.0
1956	34,446	247,784	7.19	34,193	15.0
1957	12,415	94,779	7.63	5,495	15.0
1958	20,163	123,721	6.14	11,210	15.0
1959	19,455	125,452	6.45	10,404	15.0
1960	21,644	157,226	7.26	17,686	15.0
1961	18,613	132,532	7.12	10,668	15.0
1962	63,258	348,977	5.52	52,357	17.4
1963	20,718	158,314	7.64	19,508	15.3
1964	12,746	134,000	10.51	..	..
<u>4. France</u>					
1947	-	-	-	-	-
1948	8	119	14.88	18	15.0
1949	31	707	22.81	106	15.0
1950	-	-	-	-	-
1951	882	8,644	9.80	1,296	15.0
1952	1,041	6,957	6.68	1,043	15.0
1953	1,761	6,943	3.94	996	15.0
1954	5,478	24,615	4.49	2,942	15.0
1955	590	3,125	5.30	469	15.0
1956	13,020	67,717	5.20	10,158	15.0
1957	8,275	44,252	5.35	6,638	15.0
1958	13,671	69,894	5.11	10,484	15.0
1959	24,572	117,302	4.77	16,344	15.0
1960	8,599	50,384	5.86	7,242	15.0
1961	18,566	100,376	5.41	12,541	15.0
1962	28,870	156,565	5.42	16,759	17.5
1963	13,145	78,124	5.94	4,583	15.0
1964	12,733	85,000	6.68	..	..

Table 12  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>5. Japan</u>					
1947-54	-	-	-	-	-
1955	2,340	11,817	5.05	1,773	15.0
1956	2,932	18,660	6.36	2,799	15.0
1957	1,552	9,028	5.82	473	15.0
1958	10,922	58,772	5.38	8,784	15.0
1959	28,790	156,365	5.43	23,303	15.0
1960	16,470	99,965	6.07	14,929	15.1
1961	33,845	230,144	6.80	34,522	15.0
1962	26,486	158,295	5.98	25,693	16.7
1963	24,439	176,140	7.21	25,175	14.9
1964	153,797	1,335,000	8.68	..	..
<u>6. United States</u>					
1947	200,457	1,625,986	8.11	321,157	20.0
1948	267,947	2,108,634	7.87	313,927	15.1
1949	233,929	1,810,837	7.74	265,694	15.0
1950	89,857	1,365,047	15.19	203,487	15.0
1951	215,957	2,647,070	12.26	354,322	15.0
1952	204,837	1,797,939	8.78	232,802	15.0
1953	124,482	1,372,002	11.02	198,174	15.0
1954	65,403	979,670	14.98	122,792	15.0
1955	176,410	2,388,517	13.54	332,645	14.9
1956	196,944	2,697,509	13.70	384,422	14.7
1957	84,495	1,633,262	19.33	231,541	14.5
1958	134,878	2,186,297	16.21	309,879	14.5
1959	56,557	1,434,199	25.36	192,964	13.9
1960	36,553	1,061,033	29.03	137,077	13.4
1961	34,253	1,114,661	32.54	129,124	12.2
1962	28,632	1,149,553	40.15	146,151	13.5
1963	36,191	1,418,490	39.19	168,270	12.1
1964	101,259	2,120,000	20.94	..	..

(a) Includes former s.c. 5212 after 1958 (see table 37)

(b) s.c. 5905; includes most of former s.c. 5214 and wire previously classified under former s.c. 5211 (see table 36)  
Excludes such welding wire and coated wire as was previously classified under former s.c. 5214 (see tables 7 and 25)

Table 13

Imports: Woven or welded wire fencing of iron or steel, coated or not, from wire not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch; wire fencing of iron or steel, n.o.p., s.c. 5215

Tariff item 402

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	-	16,991	-	2,124	12.5
1948	-	105,883	-	12,475	12.5
1949	-	95,733	-	11,080	12.5
1950	-	30,412	-	2,250	12.5
1951	-	38,327	-	3,236	12.5
1952	-	18,828	-	2,354	12.5
1953	-	39,017	-	4,877	12.5
1954	-	137,732	-	13,139	12.5
1955	-	209,502	-	13,808	12.5
1956	-	234,189	-	17,240	12.5
1957	-	210,732	-	13,310	12.5
1958	-	236,365	-	10,163	12.5
1959	-	223,397	-	5,491	12.9
1960	-	152,581	-	2,725	12.5
1961	-	342,150	-	13,821	12.5
1962	-	277,294	-	19,131	12.5
1963 (a)	14,739	170,611	11.58	15,105	15.5
1964	18,557	168,000	9.05	..	..
<u>2. United Kingdom</u>					
1947	-	-	-	-	-
1948	-	6,080	-	-	-
1949	-	7,092	-	-	-
1950	-	12,318	-	-	-
1951	-	12,230	-	-	-
1952	-	-	-	-	-
1953	-	-	-	-	-
1954	-	32,656	-	-	-
1955	-	99,036	-	-	-
1956	-	96,291	-	-	-
1957	-	104,253	-	-	-
1958	-	155,060	-	-	-
1959	-	180,826	-	-	-
1960	-	130,804	-	-	-
1961	-	231,943	-	39	15.9
1962	-	127,075	-	324	12.5
1963	6,514	94,276	14.47	2,840	13.3
1964	5,292	63,000	11.90	..	..



Table 13  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
3. Germany <sup>(b)</sup>					
1947-53	-	-	-	-	-
1954	-	213	-	27	12.7
1955	-	24,214	-	3,027	12.5
1956	-	70,882	-	8,862	12.5
1957	-	80,818	-	10,102	12.5
1958	-	12,754	-	1,594	12.5
1959	-	4,875	-	779	16.0
1960	-	1,011	-	127	12.6
1961	-	2,775	-	347	12.5
1962	-	5,687	-	712	12.5
1963	83	1,064	12.82	229	21.5
1964	301	3,000	9.97	..	..
4. United States					
1947	-	16,991	-	2,124	12.5
1948	-	99,803	-	12,475	12.5
1949	-	88,641	-	11,080	12.5
1950	-	18,094	-	2,250	12.5
1951	-	26,097	-	3,236	12.5
1952	-	18,828	-	2,354	12.5
1953	-	39,017	-	4,877	12.5
1954	-	103,277	-	12,914	12.5
1955	-	84,964	-	10,620	12.5
1956	-	60,829	-	7,605	12.5
1957	-	22,521	-	2,815	12.5
1958	-	64,714	-	8,089	12.5
1959	-	18,287	-	2,286	12.5
1960	-	14,368	-	1,797	12.5
1961	-	79,865	-	9,990	12.5
1962	-	46,757	-	5,849	12.5
1963	1,241	17,445	14.06	3,141	18.0
1964	703	13,000	18.49	..	..

(a) s.c. 5951 includes former s.c. 5215 and 5216 (see table 14)

(b) Beginning in 1952, West Germany only

Table 14

Imports: Woven or welded wire fencing of iron or steel,  
n.o.p., s.c. 5216(a)

Tariff items 402a, and ex 402a

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	125,113	34,432	27.5
1948	156,664	38,898	24.8
1949	256,910	63,028	24.5
1950	92,186	20,540	22.3
1951	143,710	29,278	20.4
1952	128,120	23,986	18.7
1953	183,801	34,251	18.6
1954	121,939	22,832	18.7
1955	162,681	31,686	19.5
1956	101,263	19,975	19.7
1957	79,370	15,358	19.3
1958	91,458	18,039	19.7
1959	143,376	29,313	20.4
1960	81,220	14,638	18.0
1961	42,353	8,396	19.8
1962 (a)	64,565	14,217	22.8

2. United Kingdom

1947	15,567	1,557	10.0
1948	5,599	730	13.0
1949	12,966	2,042	15.7
1950	27,101	4,269	15.8
1951	38,401	5,670	14.8
1952	21,865	2,733	12.5
1953	36,841	4,605	12.5
1954	21,362	2,670	12.5
1955	13,028	1,629	12.5
1956	3,702	463	12.5
1957	6,911	864	12.5
1958	3,368	421	12.5
1959	19,846	2,481	12.5
1960	27,907	3,555	12.7
1961	5,355	669	12.5
1962	15,700	2,311	17.2

Table 14  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>3. Austria</u>			
1947-53	-	-	-
1954	8,490	1,698	20.0
1955	4,947	989	20.0
1956	12,150	2,430	20.0
1957	27,485	5,497	20.0
1958	26,438	5,288	20.0
1959	65,496	14,615	22.3
1960	16,817	3,493	20.8
1961	393	79	20.1
1962	-	-	-
<u>4. United States</u>			
1947	109,546	32,875	30.0
1948	151,065	38,168	25.3
1949	243,944	60,986	25.0
1950	65,085	16,271	25.0
1951	105,309	23,608	22.4
1952	106,255	21,253	20.0
1953	145,633	29,182	20.0
1954	91,078	18,262	20.1
1955	129,011	25,929	20.1
1956	64,644	12,929	20.0
1957	33,983	6,799	20.0
1958	32,401	6,480	20.0
1959	18,206	3,668	20.1
1960	14,496	3,024	20.9
1961	16,069	3,290	20.5
1962	12,532	2,999	23.9

(a) Included in s.c. 5951 after 1962 (see table 13)



Table 15

Imports: Wire cloth or screen, of iron or steel, s.c. 5220

Tariff items 402a and ex 402a

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	103,255	29,116	30.0
1948	237,892	56,991	25.0
1949	330,564	78,864	25.0
1950	176,647	40,795	24.3
1951	217,845	53,215	24.8
1952	233,087	55,969	24.6
1953	356,053	86,299	24.9
1954	309,079	76,021	24.9
1955	411,175	100,736	24.7
1956	626,667	154,720	24.8
1957	571,425	141,379	24.9
1958	455,896	111,858	24.8
1959	575,144	140,408	24.5
1960	501,338	120,195	24.5
1961	562,089	136,395	24.3
1962(a)	588,021	146,108	25.7

2. United Kingdom

1947-48	-	-	-
1949	1,255	198	15.8
1950	12,898	2,031	15.7
1951	4,557	718	15.8
1952	10,800	1,701	15.8
1953	5,081	801	15.8
1954	11,058	1,742	15.8
1955	11,503	1,811	15.7
1956	13,965	2,217	15.9
1957	7,380	1,162	15.7
1958	10,744	1,692	15.7
1959	22,714	3,578	15.8
1960	23,509	3,604	15.4
1961	35,872	5,380	15.2
1962	56,966	10,373	18.2

Table 15  
(Cont'd)Duty as p.c.  
of Dutiable  
Value

Year	<u>Total Imports</u> \$	<u>Duty Collected</u> \$
------	----------------------------	-----------------------------

3. Germany (b)

1947-49	-	-	-
1950	2,016	504	25.0
1951	2,851	713	25.0
1952	2,924	731	25.0
1953	9,964	2,491	25.0
1954	24,842	6,210	25.0
1955	24,264	6,066	25.0
1956	67,509	16,868	25.0
1957	34,618	8,638	25.0
1958	37,493	9,373	25.0
1959	49,297	12,221	24.8
1960	41,961	10,428	25.0
1961	49,861	12,223	24.9
1962	56,718	15,175	27.3

4. Japan

1947-53	-	-	-
1954	7,262	2,446	33.7
1955	56,299	14,075	25.0
1956	207,360	51,840	25.0
1957	191,028	47,757	25.0
1958	125,979	31,495	25.0
1959	179,421	44,741	24.9
1960	140,821	35,143	25.0
1961	133,614	33,410	25.0
1962	192,856	48,007	24.9

5. United States

1947	103,255	29,116	30.0
1948	237,892	56,991	25.0
1949	329,309	78,666	25.0
1950	161,733	38,260	25.0
1951	210,437	51,784	25.0
1952	215,438	52,556	25.0
1953	320,869	77,973	25.0
1954	241,188	59,441	25.0
1955	308,353	76,095	25.0
1956	329,116	81,616	25.0
1957	320,569	79,364	25.0
1958	276,414	67,981	25.0
1959	305,899	75,415	24.9
1960	266,802	63,989	24.9
1961	289,292	72,051	25.0
1962	251,185	64,479	27.8

(a) Included s.c. 5955 and s.c. 5957 after 1962 (see tables 2 and 3)

(b) Beginning in 1952, West Germany only

Table 16

Imports: Wire netting of iron or steel, n.o.p., s.c. 5221

Tariff items 402a and ex 402a

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	-	282,045	-	76,292	27.0
1948	-	411,198	-	100,847	24.5
1949	-	420,195	-	103,158	24.6
1950	-	201,606	-	41,305	20.5
1951	-	399,059	-	95,146	23.8
1952	-	264,784	-	62,226	23.5
1953	-	406,365	-	91,352	22.5
1954	-	428,931	-	100,541	23.4
1955	-	309,821	-	70,986	22.9
1956	-	256,834	-	60,596	23.9
1957	-	242,813	-	53,303	22.1
1958	-	616,240	-	136,425	22.1
1959	-	538,368	-	120,703	22.4
1960	-	374,017	-	82,298	22.1
1961	-	461,967	-	106,032	23.1
1962	-	441,714	-	108,427	24.5
1963 (a)	20,185	289,517	14.34	68,760	23.7
1964	13,464	235,000	17.45	..	..
<u>2. United Kingdom</u>					
1947	-	41,608	-	4,161	10.0
1948	-	24,389	-	3,679	15.1
1949	-	20,445	-	3,220	15.7
1950	-	98,338	-	15,488	15.7
1951	-	49,934	-	7,865	15.8
1952	-	42,926	-	6,761	15.8
1953	-	115,309	-	18,171	15.8
1954	-	109,710	-	17,353	15.8
1955	-	70,104	-	11,053	15.8
1956	-	28,972	-	4,563	15.7
1957	-	76,388	-	11,959	15.8
1958	-	190,647	-	30,027	15.8
1959	-	119,340	-	18,824	15.8
1960	-	107,314	-	16,883	15.7
1961	-	80,174	-	12,416	15.9
1962	-	65,820	-	11,862	18.0
1963	3,082	51,702	16.78	7,959	15.4
1964	3,149	53,000	16.83	..	..



Table 16  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
3. Belgium and Luxembourg					
1947-53	-	-	-	-	-
1954	-	23,725	-	5,931	25.0
1955	-	18,266	-	4,578	25.1
1956	-	28,631	-	7,158	25.0
1957	-	23,781	-	5,945	25.0
1958	-	10,810	-	2,703	25.0
1959	-	33,819	-	8,455	25.0
1960	-	17,375	-	4,226	24.3
1961	-	57,278	-	14,128	24.7
1962	-	36,389	-	9,166	25.2
1963	2,342	32,812	14.01	8,058	24.6
1964	2,197	33,000	15.02	..	..
4. Germany (b)					
1947-52	-	-	-	-	-
1953	-	5,164	-	1,291	25.0
1954	-	27,631	-	6,908	25.0
1955	-	14,122	-	3,531	25.0
1956	-	44,929	-	11,232	25.0
1957	-	48,662	-	12,165	25.0
1958	-	88,457	-	22,114	25.0
1959	-	93,172	-	23,252	25.0
1960	-	75,606	-	18,889	25.0
1961	-	101,593	-	25,233	24.8
1962	-	46,995	-	12,399	26.4
1963	461	6,531	14.17	1,635	25.0
1964	1,300	17,000	13.08	..	..
5. Netherlands					
1947-51	-	-	-	-	-
1952	-	2,504	-	626	25.0
1953	-	3,559	-	890	25.0
1954	-	6,380	-	1,595	25.0
1955	-	-	-	-	-
1956	-	207	-	52	25.1
1957	-	1,495	-	374	25.0
1958	-	33,896	-	8,474	25.0
1959	-	50,499	-	11,768	23.3
1960	-	50,832	-	12,640	24.9
1961	-	119,788	-	28,839	24.1
1962	-	154,785	-	39,192	25.3
1963	6,966	99,924	14.34	25,198	25.2
1964	1,904	42,000	22.06	..	..

Table 16  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>6. United States</u>					
1947	-	240,437	-	72,131	30.0
1948	-	386,809	-	97,168	25.1
1949	-	399,750	-	99,938	25.0
1950	-	103,268	-	25,817	25.0
1951	-	349,125	-	87,281	25.0
1952	-	219,354	-	54,839	25.0
1953	-	278,161	-	69,540	25.0
1954	-	215,765	-	53,944	25.0
1955	-	168,397	-	42,091	25.0
1956	-	125,674	-	30,485	25.0
1957	-	84,382	-	20,834	25.0
1958	-	195,256	-	48,814	25.0
1959	-	111,462	-	27,746	24.9
1960	-	56,538	-	13,780	24.8
1961	-	28,006	-	6,877	24.6
1962	-	34,352	-	8,984	26.2
1963	2,246	41,651	18.54	9,101	21.9
1964	1,653	42,000	25.41	..	..

(a) s.c. 5954; includes former s.c. 5221 and 5217 (see table 17)

(b) Beginning in 1952, West Germany only

Table 17

Imports: Wire netting of iron or steel, for use on fur  
farms, s.c. 5217

Tariff items 402b(1), 402b(2) and 402g

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	77,329	4,746	6.1
1948	23,820	1,071	4.5
1949	7,638	636	8.3
1950	16,284	951	5.8
1951	54,048	3,430	6.3
1952	1,479	128	8.7
1953	4,717	628	13.3
1954	8,219	463	5.6
1955	47,544	4,694	9.9
1956	126,446	20,753	16.4
1957	47,050	8,748	18.6
1958	47,252	8,365	17.7
1959	57,050	8,498	14.9
1960	46,739	6,295	13.5
1961	47,229	6,912	14.6
1962(a)	64,163	11,102	17.3
<u>2. United Kingdom</u>			
1947	65,536	2,387	3.6
1948	22,619	849	3.8
1949	7,445	597	8.0
1950	15,984	891	5.6
1951	50,055	2,634	5.3
1952	1,121	56	5.0
1953	2,634	217	8.2
1954	7,838	392	5.0
1955	31,516	1,576	5.0
1956	28,126	1,470	5.2
1957	4,404	220	5.0
1958	7,021	351	5.0
1959	23,008	1,712	7.4
1960	28,841	2,704	9.4
1961	25,910	2,546	9.8
1962	18,773	2,024	10.8



Table 17  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>3. Belgium and Luxembourg</u>			
1947-55	-	-	-
1956	500	100	20.0
1957	9,852	1,971	20.0
1958	15,926	3,153	19.8
1959	20,163	4,033	20.0
1960	9,083	1,816	20.0
1961	1,332	247	18.5
1962	23,013	4,603	20.0
<u>4. United States</u>			
1947	11,793	2,359	20.0
1948	1,201	222	18.5
1949	193	39	20.2
1950	300	60	20.0
1951	3,993	796	19.9
1952	358	72	20.1
1953	2,083	411	19.7
1954	381	71	18.6
1955	15,802	3,077	19.5
1956	97,820	19,183	19.6
1957	32,794	6,557	20.0
1958	23,566	4,713	20.0
1959	12,030	2,384	19.8
1960	8,815	1,775	20.1
1961	14,580	3,086	21.2
1962	20,045	4,009	20.0

(a) Included in s.c. 5954 after 1962 (see table 16)

Table 18

Imports: Wire, coated with zinc or spelter, for barbed  
fencing wire or wire fencing, s.c. 5213<sup>(a)</sup>

Tariff items 402c and 402d

Year	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1947	11,151	50,584	4.54	4	10.0
1948	5,133	30,199	5.88	347	10.0
1949	28,833	165,583	5.74	94	10.0
1950	4,033	32,766	8.12	-	-
1951	3,520	29,473	8.37	203	10.0
1952	7,665	60,708	7.92	-	-
1953 <sup>(b)</sup>	18,128	142,179	7.84	-	-
<u>2. United States</u>					
1947	11,151	50,584	4.54	4	10.0
1948	5,133	30,199	5.88	347	10.0
1949	28,833	165,583	5.74	94	10.0
1950	4,033	32,766	8.12	-	-
1951	3,520	29,473	8.37	203	10.0
1952	7,665	60,708	7.92	-	-
1953	17,728	140,312	7.91	-	-

(a) Prior to 1952, s.c. 5213 was worded as; "wire of iron or steel, coated with zinc or spelter, curved or not, in coils, not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch, for the manufacture of wire fencing".

(b) Included in s.c. 5204 after 1953 (see table 10)

Table 19

Imports: Wire, spring of steel, for mattresses, cushions or upholstery, s.c. 5208

Tariff items 403a(1) and 403a(2)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	23,920	159,549	6.67	7,769	5.0
1948	48,252	330,135	6.84	16,507	5.0
1949	58,243	381,566	6.55	19,078	5.0
1950	56,510	407,592	7.21	20,334	5.0
1951	110,166	889,039	8.07	43,887	5.0
1952 (a)	64,198	458,857	7.15	22,836	5.0
1953	95,828	698,664	7.29	32,848	5.0
1954	28,960	231,076	7.98	11,554	5.0
1955	38,969	357,428	9.17	17,871	5.0
1956	56,258	528,163	9.39	26,408	5.0
1957	6,005	60,905	10.14	3,045	5.0
1958	27,457	291,812	10.63	14,168	5.0
1959	4,915	42,547	8.66	2,121	5.0
1960	8,461	75,606	8.94	3,781	5.0
1961	19,379	168,493	8.69	8,425	5.0
1962	33,553	303,072	9.03	15,220	5.0
1963 (b)	27,117	249,572	9.20	12,767	5.1
1964	39,408	346,000	8.78		
<u>2. United Kingdom</u>					
1947	225	2,284	10.15	-	-
1948-49	-	-	-	-	-
1950	691	4,957	7.17	202	5.0
1951	3,573	34,199	9.57	1,146	5.0
1952	788	5,566	7.06	171	5.0
1953	13,095	82,620	6.31	2,045	5.0
1954-57	-	-	-	-	-
1958	889	8,446	9.50	-	-
1959	5	145	29.00	-	-
1960-64	-	-	-	-	-
<u>3. Japan</u>					
1947-57	-	-	-	-	-
1958	40	338	8.45	17	5.0
1959	4,180	34,946	8.36	1,749	5.0
1960	6,179	51,614	8.35	2,582	5.0
1961	19,353	168,177	8.69	8,410	5.0
1962	30,029	263,024	8.76	13,218	5.0
1963	24,891	224,240	9.01	11,289	5.0
1964	33,172	279,000	8.41	..	..



Table 19  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u> <u>Value</u>	<u>Duty</u> <u>Collected</u>	<u>Duty as</u> <u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>4. United States</u>					
1947	23,695	157,265	6.64	7,769	5.0
1948	48,252	330,135	6.84	16,507	5.0
1949	58,243	381,566	6.55	19,078	5.0
1950	55,819	402,635	7.21	20,132	5.0
1951	103,056	822,268	7.98	41,113	5.0
1952	63,410	453,291	7.15	22,665	5.0
1953	82,733	616,044	7.45	30,803	5.0
1954	28,960	231,076	7.98	11,554	5.0
1955	38,969	357,428	9.17	17,871	5.0
1956	56,234	527,873	9.39	26,394	5.0
1957	6,005	60,905	10.14	3,045	5.0
1958	26,506	282,738	10.67	14,137	5.0
1959	730	7,456	10.21	373	5.0
1960	2,282	23,992	10.51	1,199	5.0
1961	26	316	12.15	15	4.7
1962	3,488	39,687	11.38	1,984	5.0
1963	2,226	25,332	11.38	1,478	5.8
1964	6,236	67,000	10.74	..	..

(a) Prior to 1952, s.c. 5208 was worded as: "Wire of steel, spring, not less than .40 per cent by weight of carbon, .128, .116, .104 and .092 inch in diameter, with tolerance not to exceed .003 inch, for the manufacture of mattresses, cushions or upholstery"

(b) s.c. 5903 after 1962

Table 20

Imports: Wire of steel, flat or woven flat, including steel strip in the coil, coated or not, .064 inch in thickness or thinner, with tolerance not to exceed .002 inch, for the manufacture of corset clasps, steels, wires and dress stays, s.c. 5209.

Tariff item 403(b)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	4,095	146,424	35.76	7,260	5.0
1948	4,243	152,283	35.89	7,130	5.0
1949	3,281	113,454	34.58	5,175	5.0
1950	2,841	104,962	36.95	4,765	5.0
1951	2,954	101,391	34.32	4,766	5.0
1952	1,160	39,798	34.31	1,937	5.0
1953	2,798	109,559	39.16	5,378	5.0
1954	1,767	74,257	42.02	3,361	5.0
1955	2,274	99,452	43.73	4,260	5.0
1956	3,211	143,087	44.56	6,288	5.0
1957	1,984	95,787	48.28	3,393	5.0
1958	2,167	100,550	46.40	3,807	5.0
1959	2,809	134,292	47.81	5,674	5.0
1960	2,002	94,513	47.21	3,951	5.0
1961	1,796	85,786	47.77	2,919	5.0
1962(a)	2,142	111,931	52.26	4,381	5.3
<u>2. United Kingdom</u>					
1947	28	1,223	43.68	-	-
1948	205	9,683	47.23	-	-
1949	229	9,957	43.48	-	-
1950	272	9,656	35.50	-	-
1951	182	6,072	33.36	-	-
1952	30	1,054	35.13	-	-
1953	61	2,005	32.87	-	-
1954	191	7,033	36.82	-	-
1955	406	14,245	35.09	-	-
1956	496	17,322	34.92	-	-
1957	751	27,575	36.72	-	-
1958	662	24,402	36.86	-	-
1959	562	20,806	37.02	-	-
1960	409	15,488	37.87	-	-
1961	733	27,439	37.43	-	-
1962	718	28,133	39.18	-	-

Table 20  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>3. United States</u>					
1947	4,067	145,201	35.70	7,260	5.0
1948	4,038	142,600	35.31	7,130	5.0
1949	3,052	103,497	33.91	5,175	5.0
1950	2,569	95,306	37.10	4,765	5.0
1951	2,772	95,319	34.39	4,766	5.0
1952	1,130	38,744	34.29	1,937	5.0
1953	2,737	107,554	39.30	5,378	5.0
1954	1,576	67,224	42.65	3,361	5.0
1955	1,868	85,207	45.61	4,260	5.0
1956	2,715	125,765	46.32	6,288	5.0
1957	1,193	67,160	56.30	3,340	5.0
1958	1,168	67,440	57.74	3,372	5.0
1959	1,859	103,128	55.47	5,156	5.0
1960	1,369	73,113	53.41	3,655	5.0
1961	1,037	57,733	55.67	2,888	5.0
1962	1,382	82,246	59.51	4,344	5.3

(a) Included in s.c. 5902 after 1962 (see table 9)



Table 21

Imports: Wire of steel, valued at not less than  $2\frac{3}{4}$  cents per pound,  
for the manufacture of wire rope, s.c. 5210

## Tariff Item 403(c)

Year	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1947	361,540	3,088,976	8.54	148,907	5.0
1948	470,563	4,652,427	9.89	227,923	5.0
1949	347,428	3,699,953	10.65	179,033	5.0
1950	312,542	3,091,412	9.89	71,081	5.0
1951	415,885	4,759,055	11.44	148,871	5.0
1952	555,270	6,331,301	11.40	233,765	5.0
1953	287,393	3,309,569	11.52	77,695	5.0
1954	229,608	2,489,985	10.84	35,667	5.0
1955	321,832	3,776,785	11.74	87,620	5.0
1956	485,837	5,875,430	12.09	118,521	5.0
1957	357,572	4,150,459	11.61	38,175	5.0
1958	301,952	3,610,674	11.96	35,305	5.0
1959	412,446	4,743,136	11.50	53,606	5.0
1960	410,998	4,800,742	11.68	66,873	5.0
1961	332,283	4,039,114	12.16	57,659	5.0
1962	395,553	5,024,252	12.70	87,438	5.1
1963 <sup>(a)</sup>	426,298	5,396,798	12.66	91,079	5.0
1964	463,988	5,797,000	12.49	..	..
<u>2. United Kingdom</u>					
1947	11,643	110,975	9.53	-	-
1948	9,702	93,992	9.69	-	-
1949	12,170	119,324	9.80	-	-
1950	186,862	1,669,794	8.94	-	-
1951	173,299	1,781,609	10.28	-	-
1952	149,373	1,712,078	11.46	2,802	5.0
1953	168,989	1,762,356	10.43	348	5.0
1954	174,352	1,776,643	10.19	-	-
1955	191,765	2,022,650	10.55	-	-
1956	311,853	3,505,015	11.24	-	-
1957	300,248	3,386,958	11.28	-	-
1958	247,613	2,904,567	11.73	-	-
1959	319,796	3,671,006	11.48	-	-
1960	298,554	3,477,737	11.65	722	5.0
1961	235,374	2,885,786	12.26	-	-
1962	252,319	3,276,995	12.99	65	4.9
1963	278,129	3,589,712	12.91	51	5.0
1964	268,844	3,621,000	13.47	..	..

Table 21  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
<u>3. Germany</u> <sup>(b)</sup>					
1947-50	-	-	-	-	-
1951	1,329	18,038	13.57	902	5.0
1952	2,649	31,589	11.92	1,579	5.0
1953	100	1,360	13.60	68	5.0
1954	617	5,934	9.62	297	5.0
1955	5,893	59,858	10.16	2,993	5.0
1956	22,565	251,511	11.15	12,576	5.0
1957	20,902	220,514	10.55	11,025	5.0
1958	31,286	327,029	10.45	16,351	5.0
1959	71,743	752,205	10.48	37,610	5.0
1960	76,725	866,730	11.30	43,337	5.0
1961	60,546	737,584	12.18	36,874	5.0
1962	75,706	993,539	13.12	49,505	5.1
1963	74,167	1,037,439	13.99	51,938	5.0
1964	73,208	952,000	13.00	..	..
<u>4. Japan</u>					
1947-56	-	-	-	-	-
1957	1,003	13,493	13.45	675	5.0
1958	1,298	14,538	11.20	727	5.0
1959	9,208	92,800	10.08	4,640	5.0
1960	27,198	289,935	10.66	14,498	5.0
1961	32,969	333,319	10.11	16,669	5.0
1962	59,460	613,422	10.32	30,797	5.0
1963	70,472	698,995	9.92	35,546	5.1
1964	104,020	1,018,000	9.79	..	..
<u>5. United States</u>					
1947	349,897	2,978,001	8.51	148,907	5.0
1948	460,861	4,558,435	9.89	227,923	5.0
1949	335,258	3,580,629	10.68	179,033	5.0
1950	125,680	1,421,618	11.31	71,081	5.0
1951	235,266	2,866,626	12.18	143,330	5.0
1952	403,248	4,587,634	11.38	229,384	5.0
1953	117,808	1,540,538	13.08	77,013	5.0
1954	53,069	690,881	13.02	34,544	5.0
1955	122,698	1,677,267	13.67	83,777	5.0
1956	147,742	2,076,365	14.05	103,818	5.0
1957	32,926	502,069	15.25	25,104	5.0
1958	20,435	352,488	17.25	17,624	5.0
1959	11,699	227,125	19.41	11,356	5.0
1960	8,521	166,340	19.52	8,316	5.0
1961	3,348	81,570	24.36	4,073	5.0
1962	4,464	109,601	24.55	5,514	5.0
1963	601	44,477	74.00	2,234	5.0
1964	4,250	77,000	18.12	..	..

(a) s.c. 5901 after 1962

(b) Beginning in 1952, West Germany only

Table 22

Imports: Wire rope, or cable, steel, coated or not, and wire, steel, single, not covered, in coils, for trolling in bona fide, deep sea or inland commercial fishing operations, n.o.p., s.c. 5211

Tariff Items 403(d), 403(f) and 403(g)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
1. Total					
1947	-	10,300	-	773	7.5
1948	-	10,607	-	796	7.5
1949	-	4,526	-	339	7.5
1950	-	4,378	-	328	7.5
1951	-	14,558	-	460	7.5
1952	-	5,260	-	395	7.5
1953	-	82,898	-	1,359	8.8
1954	-	174,295	-	3,520	9.7
1955	-	260,769	-	1,945	9.7
1956	-	222,199	-	798	9.8
1957	-	249,077	-	2,406	9.4
1958	-	382,714	-	2,438	9.7
1959(a)	-	347,452	-	6,496	9.9
1960	-	386,170	-	6,514	10.6
1961	-	412,100	-	5,899	10.0
1962	23,522	519,632	22.09	6,577	10.2
1963(b)	28,920	631,250	21.83	4,277	10.1
1964	29,275	674,000	23.02	..	..
2. United Kingdom					
1947-50	-	-	-	-	-
1951	-	725	-	-	-
1952	-	-	-	-	-
1953	-	67,412	-	-	-
1954	-	137,912	-	-	-
1955	-	237,579	-	-	-
1956	-	214,017	-	-	-
1957	-	221,791	-	-	-
1958	-	356,226	-	-	-
1959	-	281,514	-	-	-
1960	-	323,723	-	-	-
1961	-	354,776	-	260	11.6
1962	21,481	453,206	21.10	-	-
1963	26,670	578,490	21.69	141	18.0
1964	24,939	566,000	22.70	..	..



Table 22  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>Value</u> <u>\$/cwt.</u>	<u>Collected</u> <u>\$</u>	<u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
<u>3. United States</u>					
1947	-	10,300	-	773	7.5
1948	-	10,607	-	796	7.5
1949	-	4,526	-	339	7.5
1950	-	4,378	-	328	7.5
1951	-	13,833	-	460	7.5
1952	-	5,260	-	395	7.5
1953	-	9,410	-	751	8.0
1954	-	8,955	-	777	8.8
1955	-	9,460	-	572	8.9
1956	-	1,424	-	122	8.6
1957	-	9,741	-	652	8.2
1958	-	6,599	-	449	8.6
1959	-	31,017	-	3,004	9.7
1960	-	31,793	-	2,760	9.0
1961	-	29,577	-	2,862	10.0
1962	455	34,940	76.79	3,484	10.2
1963	44	8,054	183.05	698	10.0
1964	295	20,000	67.80	..	..

(a) Includes s.c. 5222 after 1958

(b) s.c. 5927; includes wire rope imports previously covered by former s.c. 5211. Imports other than wire rope now included in s.c. 5905 and s.c. 5919 (see tables 8 and 12)

Table 23

Imports: Wire, steel, for the manufacture of machine card clothing,  
s.c. 5212

---

Tariff Item 403(e)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>
	cwt.	\$	\$/cwt.
<u>1. Total</u>			
1947	122	4,833	39.61
1948	63	2,499	39.67
1949	299	3,931	13.15
1950	184	6,429	34.94
1951	341	13,069	38.33
1952	207	6,768	32.70
1953	461	16,653	36.12
1954	185	5,303	28.66
1955	161	5,325	33.07
1956	198	11,407	57.61
1957	79	2,962	37.49
1958(a)	57	2,399	42.09
<u>2. United Kingdom</u>			
1947	111	4,396	39.60
1948	-	-	-
1949	256	2,073	8.10
1950	155	5,067	32.69
1951	301	10,938	36.34
1952	184	5,940	32.28
1953	454	16,269	35.83
1954	157	4,291	27.33
1955	150	4,874	32.49
1956	52	1,842	35.42
1957	79	2,962	37.49
1958	42	1,405	33.45

(a) Included in s.c. 5214 after 1958 (see table 12)

Table 24

Imports: Wire of rust or acid resisting steel, twisted or stranded,  
for commercial fishing operations, s.c. 5222

---

Tariff Item 403(f)

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	9,958	1,373	13.8
1948	11,758	1,176	10.0
1949	10,456	1,046	10.0
1950	5,728	494	10.0
1951	13,658	603	10.0
1952	9,186	779	10.0
1953	11,488	604	10.0
1954	9,667	945	10.0
1955	17,687	1,275	10.0
1956	17,656	1,766	10.0
1957	16,527	1,551	10.0
1958 <sup>(a)</sup>	21,329	1,929	10.0
<u>2. United States</u>			
1947	9,958	1,373	13.8
1948	11,758	1,176	10.0
1949	10,456	1,046	10.0
1950	4,936	494	10.0
1951	6,032	603	10.0
1952	7,791	779	10.0
1953	5,223	522	10.0
1954	9,446	945	10.0
1955	13,209	1,275	10.0
1956	17,656	1,766	10.0
1957	15,154	1,516	10.0
1958	17,401	1,740	10.0

<sup>(a)</sup> Included in s.c. 5211 after 1958 (see table 22)



Table 25

Imports: Wire of brass, zinc, iron or steel, screwed or twisted, flattened or corrugated, for use in connection with nailing machines for the manufacture of boots and shoes, s.c. 6245

Tariff Item 456

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>
	cwt.	\$	\$/cwt.
<u>1. Total</u>			
1947	74,438	12,642	.170
1948	30,874	6,518	.211
1949	33,450	6,500	.194
1950	70,711	14,161	.200
1951	56,175	9,747	.174
1952	12,575	3,887	.309
1953	32,187	5,399	.168
1954	31,721	6,285	.198
1955	5,300	1,369	.258
1956	34,893	6,036	.173
1957(a)	8,000	3,187	.398
<u>2. United Kingdom</u>			
1947	600	109	.182
1948	100	76	.691
1949	-	-	-
1950	25,096	2,966	.118
1951	33,174	4,143	.125
1952	5,312	811	.153
1953	16,929	1,652	.098
1954	2,240	240	.107
1955	-	-	-
1956	22,346	2,686	.120
1957	-	-	-
<u>3. United States</u>			
1947	73,838	12,533	.170
1948	30,764	6,442	.209
1949	33,450	6,500	.194
1950	45,615	11,195	.245
1951	23,001	5,604	.244
1952	7,263	3,076	.424
1953	15,258	3,747	.246
1954	16,655	4,173	.251
1955	5,300	1,369	.258
1956	12,547	3,350	.267
1957	8,000	3,187	.398

(a) Not available separately after 1957

Table 26

Exports: Wire rods, steel, hot rolled, s.c. 444-50

<u>Year</u>	<u>Total Exports</u>		<u>Unit Value</u> \$/cwt.
	cwt.	\$	
1960 <sup>(a)</sup>	730,122	4,096,292	5.61
1961 <sup>(b)</sup>	111,978	698,208	6.24
1962	57,183	366,081	6.40
1963	121,441	790,918	6.51
1964	139,627	1,110,547	7.95

<sup>(a)</sup> Not available separately prior to 1960

<sup>(b)</sup> Prior to 1961, s.c. 5109, which was entitled "Wire rods, steel"

Table 27

Exports: Wire, galvanized, s.c. 449-20

<u>Year</u>	<u>Total Exports</u>		<u>Unit Value</u> \$/cwt.
	cwt.	\$	
1961 <sup>(a)</sup>	10,976	162,093	14.77
1962	25,033	306,836	12.26
1963	20,862	238,237	11.42
1964	16,615	184,456	11.10

<sup>(a)</sup> Included in former s.c. 5220 prior to 1961 (see table 37)

Table 28

Exports: Wire rope, twisted wire, and multiple wire strand,  
s.c. 449-49

<u>Year</u>	<u>Total Exports</u>		<u>Unit Value</u>
	cwt.	\$	\$/cwt.
1950	..	84,389	..
1951	..	138,371	..
1952	..	196,591	..
1953	..	92,972	..
1954	..	135,255	..
1955	..	131,599	..
1956	..	407,947	..
1957	..	230,065	..
1958	..	183,988	..
1959	..	357,573	..
1960	..	228,822	..
1961 (a)	9,293	234,541	25.24
1962	10,749	256,278	23.84
1963	18,430	472,693	25.65
1964	13,670	314,301	22.99

(a) Prior to 1961, s.c. 5195, which was entitled "Wire cable and wire rope of iron and steel"

Table 29

Exports: Wire, n.e.s., s.c. 449-59

<u>Year</u>	<u>Total Exports</u>		<u>Unit Value</u>
	cwt.	\$	\$/cwt.
1961 (a)	39,064	929,748	23.80
1962	53,456	773,202	14.46
1963	68,502	837,727	12.23
1964	73,620	984,641	13.37

(a) Includes former s.c. 5190 and the non-galvanized wire part of former s.c. 5220 (see tables 34 and 37)



Table 30

Exports: Insect wire screening, steel, s.c. 463-41

<u>Year</u>	<u>Total Exports</u> \$
1961 (a)	17,918
1962	8,786
1963	8,157
1964	267

(a) Included in former s.c. 5200 prior to 1961 (see table 35)

Table 31

Exports: Insect wire screening, n.e.s., s.c. 463-43

<u>Year</u>	<u>Total Exports</u> \$
1961 (a)	29,071
1962	29,806
1963	15,127
1964	6,079

(a) Not available separately prior to 1961

Table 32

Exports: Wire fencing, screening and netting, n.e.s., s.c. 463-99

<u>Year</u>	<u>Total Exports</u> \$
1961 (a)	463,709
1962	458,229
1963	302,491
1964	507,532

(a) Not available separately prior to 1961

Table 33

Exports: Welding wire, rods, electrodes and solders, s.c. 469-80

<u>Year</u>	<u>Total Exports</u>		<u>Unit Value</u>
	cwt.	\$	\$/cwt.
1961 (a)	13,541	708,942	52.36
1962	5,032	489,444	97.27
1963	3,727	293,067	78.63
1964	6,886	516,697	75.04

(a) Not available separately prior to 1961

Table 34

Exports: Wire, barbed, of iron and steel, s.c. 5190

<u>Year</u>	<u>Total Exports</u>		<u>Unit Value</u> \$/cwt.
	cwt.	\$	
1950	55	510	9.27
1951	431	3,481	8.08
1952	18	187	10.39
1953	9	44	4.89
1954	26	105	4.04
1955	111	965	8.69
1956	6	71	11.83
1957	-	-	-
1958	29	310	10.69
1959	245	2,110	8.61
1960 (a)	1,459	14,698	10.07

(a) Included in s.c. 449-59 after 1960 (see table 29)

Table 35

Exports: Wire, screen of iron, s.c. 5200

<u>Year</u>	<u>Total Exports</u>
	\$
1950	121,184
1951	320,655
1952	216,395
1953	162,668
1954	125,809
1955	168,633
1956	149,633
1957	203,327
1958	204,036
1959	378,456
1960 (a)	255,038

(a) Included in s.c. 463-41 and s.c. 463-99 after 1960  
(see tables 30 and 32)



Table 36

Exports: Woven wire fencing of iron and steel, s.c. 5210(a)

<u>Year</u>	<u>Total Exports</u> \$
1950	14,213
1951	7,942
1952	5,040
1953	10,659
1954	3,501
1955	2,817
1956	3,672
1957	4,567
1958	7,187
1959	17,822
1960(a)	153,609

(a) Included in s.c. 463-99 after 1960 (see table 32)

Table 37

Exports: Wire of iron and steel, n.o.p., s.c. 5220(a)

<u>Year</u>	<u>Domestic Produce Exports</u> \$	<u>Foreign Produce Exports</u> \$	<u>Total Exports</u> \$
1950	625,315	77,398	702,713
1951	293,557	15,677	309,234
1952	334,723	19,982	354,705
1953	496,115	41,221	537,336
1954	49,336	93,710	143,046
1955	92,612	21,752	114,364
1956	87,647	43,337	130,984
1957	87,633	93,564	181,197
1958	65,925	58,387	124,312
1959	3,108,530	145,595	3,254,125
1960(a)	1,879,130	101,584	1,980,714

(a) Included in s.c. 449-20 and s.c. 449-59 after 1960  
(see tables 27 and 29)

Table 38

Exports: Wire screen, n.o.p. (except copper and iron) s.c. 6660

<u>Year</u>	<u>Total Exports</u> \$
1950	137,169
1951	164,813
1952	474,914
1953	119,928
1954	171,306
1955	278,732
1956	242,444
1957	199,962
1958	129,375
1959	54,023
1960 (a)	133,749

(a) Included in s.c. 463-43 and s.c. 463-99 (see tables 31 and 32)

APPENDIX II

TARIFF HISTORY



Tariff HistoryB.P.M.F.N.GeneralTariff Item 379c

Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, when imported by manufacturers of wire for use in the manufacture of wire, in their own factories

1958, June 18	per ton	Free	\$3.00	\$5.00
---------------	---------	------	--------	--------

Prior to June 18, 1958 the rod was dutiable under tariff item 379d viz.:- Rods, in the coil, not over .375 inch in diameter when imported by manufacturers of wire for use exclusively in the manufacture of wire, in their own factories.

1930, September 17	per ton	\$2.25	\$5.00	\$5.00
1930, May 2	per ton	\$2.25	\$4.50	\$5.00

Tariff Item 379d

Rods of iron or steel, in the coil, not more than 0.375 inch in diameter, for use in the manufacture of wire for wire fencing

1961, July 1	per ton	Free	Free	\$5.00
--------------	---------	------	------	--------

Prior to July 1, 1961 the rod was classified under tariff item 379c (see history above).

Tariff Item 401(a) (GATT)

Wire, of iron or steel:-

(a) Barbed fencing, coated or not

1932, October 13	Free	10 p.c.	10 p.c.
1930, May 2	Free	Free	Free

Tariff Item 401(b) (GATT)

Wire, of iron or steel:-

...

(b) Twisted, braided or stranded, including wire rope or cable, coated or not, n.o.p.

1932, October 13	15 p.c.	25 p.c.	25 p.c.
1930, May 2	15 p.c.	22½ p.c.	25 p.c.

B. P.M. F. N.GeneralTariff Item 401(c) (GATT)

Wire, of iron or steel:-

...  
 (c) Drawn flat or cold rolled flat after drawing, coated or not, n.o.p., not more than .25 inch in width and less than .1875 inch in thickness

1932, October 13	7½ p.c.	20 p.c.	20 p.c.
1930, May 2	7½ p.c.	15 p.c.	20 p.c.

Tariff Item 401(d) (GATT)

Wire, of iron or steel:-

...  
 (d) Coated with zinc or spelter, curved or not, in coils, .144, .104, or .092 inch in diameter, with tolerance not to exceed .004 inch, and not for use in telegraph or telephone lines, n.o.p.

1935, March 23	Free	10 p.c.	10 p.c.
----------------	------	---------	---------

Prior to March 23, 1935 the description excluded the letters "n.o.p."

1932, October	Free	10 p.c.	10 p.c.
1930, May 2	Free	Free	Free

Tariff Item 401(e) (GATT)

Wire, of iron or steel:-

...  
 (e) Coated with zinc or spelter, n.o.p.

1932, October 13	10 p.c.	20 p.c.	20 p.c.
1930, May	10 p.c.	17½ p.c.	20 p.c.

Tariff Item 401(f) (GATT)

Wire, of iron or steel:-

...  
 (f) Single or several coated, n.o.p., or covered with any material, including cable so covered

1951, June 6 (GATT)		25 p.c.	
1932, October 13	15 p.c.	30 p.c.	30 p.c.
1930, May 2	15 p.c.	25 p.c.	30 p.c.

B.P.M.F.N.GeneralTariff Item 401(g) (GATT)

Wire, of iron or steel:-

(g) N.o.p. ...

1948, January 1 (GATT)		15 p.c.	
1932, October 13	15 p.c.	20 p.c.	20 p.c.
1930, May 2	15 p.c.	17½ p.c.	20 p.c.

Tariff Item 402

Woven or welded wire fencing, of iron or steel, coated or not, from wire not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch; wire fencing, of iron or steel, coated or not, n.o.p.

1954, April 17	Free	12½ p.c.	15 p.c.
----------------	------	----------	---------

Prior to April 7, 1954 the description of woven or welded wire fencing excluded the words "coated or not".

1930, May 2	Free	12½ p.c.	15 p.c.
-------------	------	----------	---------

Tariff Item 402a (GATT)

Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.; wire cloth or wire netting, of iron or steel, coated or not

1948, January 1 (GATT)	17½ p.c.	25 p.c.	
1939, January 1 (United States Trade Agreement)		30 p.c.	
1937, February 26	20 p.c.	35 p.c.	35 p.c.
1931, June 2	25 p.c.	35 p.c.	35 p.c.
1930, May 2	15 p.c.	27½ p.c.	30 p.c.

Tariff Item Ex. 402a (GATT)

Woven or welded wire fencing, of iron or steel, coated or not, n.o.p.

1951, June 6 (GATT)	12½ p.c.	20 p.c.
---------------------	----------	---------

Prior to June 6, 1951 the material now provided for in tariff item Ex. 402a was classified under tariff item 402a (see history above).

Tariff Item Ex. 402a (GATT)

Wire cloth or wire netting, of iron or steel, coated or not

1948, January 1	17½ p.c.	25 p.c.
-----------------	----------	---------



B.P.M.F.N.General

Prior to January 1, 1948 the material now provided for in tariff item Ex. 402a was classified under tariff item 402a (see history above).

Tariff Item 402b (GATT)

Woven netting, of iron or steel, coated, made from wire of 17 gauge or heavier, with meshes not smaller than one inch and not larger than two inches, with specially strengthened joints, when for use exclusively on fur farms, under regulations prescribed by the Minister:

1948, January 1 (GATT)

(1) of a class or kind not  
made in Canada

5 p.c.

12½ p.c.

(2) N.o.p.

12½ p.c.

20 p.c.

From January 1, 1939 to December 31, 1947 importations from Great Britain under the item, when of a class or kind not made in Canada, were dutiable at 5 p.c. in accordance with Articles VII and VIII of the U.K. Trade Agreement.

1939, January 1 (United States

Trade Agreement)

20 p.c.

1937, February 26

12½ p.c.

27½ p.c.

30 p.c.

1931, June 2

15 p.c.

27½ p.c.

30 p.c.

Tariff Item 402c

Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, not more than .144 inch and not less than .080 inch in diameter, with tolerance not to exceed .004 inch, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories.

1935, March 23

Free

10 p.c.

10 p.c.

Prior to March 23, 1935 the material now dutiable under tariff item 402c was classified under tariff items 401(d) and 401(e) (see history above).

Tariff Item 402d

Wire of iron or steel, coated with zinc or spelter, curved or not, in coils, when imported by manufacturers of barbed fencing wire or of wire fencing for use exclusively in the manufacture of barbed fencing wire or of wire fencing, in their own factories

1947, February 1

Free

Free

Free

Prior to February 1, 1947 the material now provided for under tariff item 402d was classified under tariff items 401(d) and 401(e) (see histories above).

B.P.M.F.N.GeneralTariff Item 402e

Speedometer flexible shafting, consisting of a steel centre wire around which two or more layers of steel wire are helically wound consecutively in opposite directions, in coils of not less than 1,000 feet, when imported by manufacturers of speedometers or speedometer parts, for use in the manufacture or repair of such articles

1952, April 9	Free	Free	35 p.c.
1949, January 15 (Order in Council)	Free	Free	35 p.c.

Prior to January 15, 1949 the material now provided for under tariff item 402e was dutiable under tariff item 446a viz.:- Manufactures, articles or wares, of iron or steel or of which iron or steel or both are the component material of chief value, n.o.p.

1948, January 1 (GATT)		25 p.c.	
1939, January 1 (United States)			
Trade Agreement)		25 p.c.	
1936, May 2	10 p.c.	27 $\frac{1}{2}$ p.c.	35 p.c.
1931, June 2	15 p.c.	27 $\frac{1}{2}$ p.c.	35 p.c.
1930, May 2	15 p.c.	25 p.c.	30 p.c.

Tariff Item 402f

Wire, cold drawn, galvanized, tempered or not, in coils of not less than 5,000 feet, for use in the manufacture of flexible outer casing for speedometer cables

1957, January 1	Free	Free	20 p.c.
-----------------	------	------	---------

Prior to January 1, 1957 the item was worded as follows:- Galvanized, tempered or not, in coils of not less than 5,000 feet, when imported by manufacturers for use exclusively in the manufacture of speedometer flexible outer casing

1949, January 15	Free	Free	20 p.c.
------------------	------	------	---------

Prior to January 15, 1949 the material now provided for under tariff item 402f was classified under tariff items 401(d) and 401(e) (see histories above).

Tariff Item 402g (GATT)

Welded netting, of iron or steel, coated or not, made from wire of seventeen gauge or heavier, with meshes not smaller than one-half inch by one-half inch and not larger than two inches by two inches, when for use exclusively on fur farms, under such regulations as the Minister may prescribe

1956, March 21	12 $\frac{1}{2}$ p.c.	20 p.c.	35 p.c.
----------------	-----------------------	---------	---------

Prior to March 21, 1956 the material now provided for under tariff item 402g was dutiable under tariff item 402a (see history above).

B.P.M.F.N.GeneralTariff Item 402h

Wire of iron or steel, uncoated, curved or not, in coils, not more than 0.144 inch and not less than 0.080 inch in diameter, with tolerance not to exceed 0.004 inch, for use in the manufacture of woven or welded wire fencing.

1961, November 1	7½ p.c.	7½ p.c.	20 p.c.
1956, October 1	Free	Free	20 p.c.

Prior to October 1, 1956 the material now dutiable under tariff item 402h was classified under tariff item 401(g) (see history above).

Tariff Item 403(a)

Wire of steel:-

(a) Spring, not less than .40 per centum, by weight, of carbon, when imported for use exclusively in the manufacture of springs for mattresses, cushions or upholstery:-

1948, May 19:

(i) .128, .116, .104 and .092 inch in diameter, with a tolerance not to exceed .003 inch	Free	5 p.c.	7½ p.c.
(ii) .144, .080, .072, .064, .056 and .048 inch in diameter, with a tolerance not to exceed .003 inch	5 p.c.	5 p.c.	7½ p.c.

Prior to May 19, 1948 the item was worded as follows:-  
Spring, not less than .40 per centum, by weight, of carbon, .128, .116, .104 and .092 inch in diameter, with tolerance not to exceed .003 inch when imported by manufacturers of mattresses, cushions or upholstery for use exclusively in the manufacture of mattresses, cushions or upholstery, in their own factories, under regulations prescribed by the Minister.

1930, May 2	Free	5 p.c.	7½ p.c.
-------------	------	--------	---------

Tariff Item 403(b)

Wire, of steel:-

...  
(b) Flat or woven flat, including steel strip, in the coil, coated or not, .064 inch in thickness or thinner, with tolerance not to exceed .002 inch, when imported by manufacturers of corset clasps, steels, wires and dress stays for use exclusively in the manufacture of corset clasps, steels, wires and dress stays, in their own factories

1931, June 2	Free	5 p.c.	5 p.c.
--------------	------	--------	--------



B.P.M.F.N.GeneralTariff Item 403(c) (GATT)

Wire, of steel:-

...  
 (c) Valued at not less than two and three-quarter cents per pound for use in the manufacture of wire rope

1960, April 1	Free	5 p.c.	7½ p.c.
---------------	------	--------	---------

Prior to April 1, 1960 the item was worded as follows:-  
 Valued at not less than 2½ cents per pound, when imported by manufacturers of wire rope for use exclusively in the manufacture of wire rope, in their own factories, under regulations prescribed by the Minister.

1930, May 2	Free	5 p.c.	7½ p.c.
-------------	------	--------	---------

Tariff Item 403(d)

Wire, of steel:-

...  
 (d) Single, not covered, in coils, for use exclusively in trolling in bona fide deep sea or inland commercial fishing operations

1930, May 2	Free	7½ p.c.	10 p.c.
-------------	------	---------	---------

Tariff Item 403(e)

Wire, of steel:-

...  
 (e) Steel, wire, coated or not, when imported by manufacturers of machine card clothing for use exclusively in the manufacture of machine card clothing, in their own factories

1961, April 11	Free	Free	Free
----------------	------	------	------

Prior to April 11, 1951 the description excluded the wording "coated or not".

1931, June 2	Free	Free	Free
--------------	------	------	------

Tariff Item 403(f)

Wire, of steel:-

...  
 (f) Wire, of rust or acid resisting steel, twisted or stranded, for use exclusively in commercial fishing operations

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1939, April 26	Free	10 p.c.	25 p.c.
1939, January 1 (United States Trade Agreement)		10 p.c.	

Prior to April 26, 1939 the material now provided for under tariff item 403(f) was classified under tariff item 401(b) (see history above).

Tariff Item 403(g)

Wire, of steel:-

...  
(g) Wire rope or cable, coated or not, for use exclusively in commercial fishing operations

1953, February 20	Free	10 p.c.	25 p.c.
-------------------	------	---------	---------

Prior to February 20, 1953 the material now provided for under tariff item 403(g) was dutiable under tariff item 401(b) (see history above).

Tariff Item 403(h)

Wire, of steel:-

(h) Spring steel music wire, coated or not, having a tensile strength of not less than two hundred and thirty thousand pounds per square inch, for the manufacture of mechanical springs

1961, February 1	12 $\frac{1}{2}$ p.c.	12 $\frac{1}{2}$ p.c.	30 p.c.
1955, October 1	7 $\frac{1}{2}$ p.c.	7 $\frac{1}{2}$ p.c.	30 p.c.

Prior to October 1, 1955 the music wire now provided for under tariff item 403(h) was classified under tariff items 401(d), 401(e), 401(f) and 401(g) (see histories above).

Tariff Item 409e(3) (GATT)

Binder twine; wire and twine for baling farm produce

1953, February 20	Free	Free	Free
-------------------	------	------	------

Prior to February 20, 1953 wire for baling farm produce was dutiable under tariff item Ex 401(g) at the following rates:

1951, October 19	Free
------------------	------

Prior to October 19, 1951 wire for baling farm produce, if looped, was dutiable under tariff item 446a (see history of tariff item 402e); otherwise, it was dutiable under tariff item 401(g) (see history above).

B.P.M.F.N.GeneralTariff Item 446m (GATT)

Welding rods or welding wires of rust, acid or heat resisting steel, whether or not flux-coated

1950, June 1	10 p.c.	15 p.c.	35 p.c.
--------------	---------	---------	---------

Prior to June 1, 1950 the material now dutiable under tariff item 446m was classified principally under tariff item 446a (see history of tariff item 402e).

Tariff Item 456

Wire of brass, zinc, iron or steel, screwed, twisted, flattened or corrugated, for use exclusively in connection with nailing machines for the manufacture of boots and shoes, in boot and shoe factories, under regulations prescribed by the Minister

1930, May 2	Free	Free	Free
-------------	------	------	------

Tariff Item 596a

Steel music wire for use in the manufacture of piano strings

1962, July 1	10 p.c.	10 p.c.	30 p.c.
1960, June 29	Free	Free	30 p.c.

Prior to June 29, 1960 the item was numbered 676

1956, January 1	Free	Free	30 p.c.
-----------------	------	------	---------

Prior to January 1, 1956 the music wire previously provided for in tariff item 676 was dutiable under tariff item 401(g) (see history above).



APPENDIX III

NET PRODUCTION IN CANADA OF  
HOT-ROLLED STEEL PRODUCTS

NET PRODUCTION IN CANADA OF HOT-ROLLED STEEL PRODUCTS

	<u>1951</u>	<u>1953</u>	<u>1955</u>	<u>1957</u>	<u>1959</u>	<u>1961</u>	<u>1962</u>	<u>1963 (a)</u>	<u>1964</u>
					Tons				
Wire Rods	318,266	286,471	357,775	291,300	382,106	356,574	356,262	386,851	444,831
Blooms, Billets and Slabs	148,629	174,864	214,615	158,924	232,052	318,258	309,723	422,592	507,808
Rails	257,244	303,318	228,991	393,926	286,989	197,416	233,067	342,171	253,678
Bars for rail fastenings	91,866	69,286	89,755	102,114	95,346	58,993	65,603	63,794	73,360
Structural Shapes	228,092 (b)	283,203	241,698	347,693	268,573	329,572	462,442	480,938	546,895
Bars	671,139	662,989	652,739	763,419	854,519	840,802	941,421	1,049,001	1,204,290
Plates (excluding plates for pipes and tubes)		221,818	253,640	349,626	416,099	410,267	489,968	543,518	615,046
Sheets, hoops, bands and strips (excluding skelp)	1,058,751	1,036,789	1,194,556	1,194,670	1,772,395	1,891,100	2,212,511	2,995,152	3,238,979
Other hot-rolled forms (including hot-rolled skelp)	85,550 (b)	147,215	256,593	363,032	359,635	486,728	367,106	453,039	511,801
Total	2,859,537	3,185,953	3,490,362	3,964,704	4,667,714	4,889,710	5,438,103	6,737,056	7,396,688
Wire Rods as % of total	11.1	9.0	10.3	7.3	8.2	7.3	6.6	5.8	6.1

(a) Preliminary  
(b) Sheet piling included in other hot-rolled forms in 1951

Source: D.B.S.







CANADA, Tariff Board  
111

Report (by)  
**(THE TARIFF BOARD)**

(Relative to the Inquiry Ordered  
by the Minister of Finance  
respecting)

**(WIRE AND WIRE PRODUCTS)**

●

LIBRARY  
MAR 20 1966  
UNIVERSITY OF TORONTO  
(VOLUME 2

Wire and Wire Cloth of  
Non-Ferrous Metals)

●

**(Reference No. 132)**





CAI FN 55  
-65R32



Report by  
**THE TARIFF BOARD**

Relative to the Inquiry Ordered  
by the Minister of Finance  
respecting  
**WIRE AND WIRE PRODUCTS**



**VOLUME 2**  
Wire and Wire Cloth of  
Non-Ferrous Metals



***Reference No. 132***

© Crown Copyrights reserved

Available by mail from the Queen's Printer, Ottawa,  
and at the following Canadian Government bookshops:

OTTAWA

*Daly Building, Corner Mackenzie and Rideau*

TORONTO

*Mackenzie Building, 36 Adelaide St. East*

MONTREAL

*Æterna-Vie Building, 1182 St. Catherine St. West*

WINNIPEG

*Mall Center Bldg., 499 Portage Avenue*

VANCOUVER

*657 Granville Avenue*

or through your bookseller

A deposit copy of this publication is also available  
for reference in public libraries across Canada

Price \$2.00

Catalogue No. FT4-132/2

*Price subject to change without notice*

ROGER DUHAMEL, F.R.S.C.

Queen's Printer and Controller of Stationery

Ottawa, Canada

1965

## THE TARIFF BOARD

---

L.C. Audette, Q.C.	Chairman
G.H. Glass	First Vice-Chairman
F.L. Corcoran, Q.C.	Second Vice-Chairman
G.A. Elliott	Member
E.C. Gerry	Member
Léo Gervais	Member
A.DeB. McPhillips	Member

J.E. Gander	R.F. Lalonde
Director of Research	Secretary

---

## PANEL FOR THIS INQUIRY

G.H. Glass, Presiding  
E.C. Gerry  
A.DeB. McPhillips

---

Economist: J.W. Morrow, Assistant Director of Research





The Honourable Walter L. Gordon, P.C., M.P.,  
Minister of Finance,  
Ottawa, Ontario

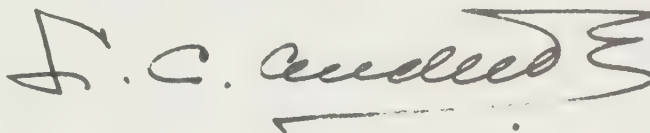
Dear Mr. Gordon:

I refer to Mr. Nowlan's letter of November 2, 1962, in which he requested the Tariff Board to conduct an inquiry respecting wire and wire products.

In conformity with Section 6 of the Tariff Board Act, I have the honour to transmit Volume 2 of the Report of the Board, in English and French. This volume relates to wire and wire cloth of non-ferrous metals. A copy of the transcript of the proceedings at the public hearings accompanies the Report.

The first volume dealt with rod, wire and wire products of iron or steel.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "J. C. Audette", followed by a large, stylized flourish or scribble.

Chairman





TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	11
SECTION I ELECTRICAL WIRE AND CABLE	13
Introduction	13
The Products and their Uses	13
The Producers	17
Processes of Production	19
The Market	21
General Trends	21
Imports by Tariff Items	24
The Competitive Position of the Industry	29
Tariffs and Other Factors Impeding Imports	29
Factors Affecting Costs	31
Prices in Canada and Abroad	37
Financial Results	42
Summary	43
Representations and Proposals	44
SECTION II OTHER NON-FERROUS WIRE	49
Tariff Item 342	49
Tariff Item 347b	50
Tariff Item 348f	51
Tariff Item 350a	54
Tariff Item 354d	54
SECTION III WIRE CLOTH OF BRASS OR COPPER	57
<hr/>	
SUMMARY AND CONCLUSIONS	59
RECOMMENDED SCHEDULE AND DEFINITIONS	63
NOTES ON DEFINITIONS AND RECOMMENDED ITEMS	65
NOTES ON EXISTING ITEMS	69
<hr/>	

TABLE OF CONTENTS  
(Cont'd)

	<u>Page</u>
APPENDICES	
A      Import and Export Statistics	75
B      General Statistical Data	107
C      Summary Contained in Submission of Canadian Electrical Manufacturers Association	111
D      Tariff History	115

Explanation of Symbols Used

- Denotes zero or none reported
- .. Indicates that figures are not available
- \* In statistical tables, indicates a reported figure which disappears on rounding, or is negligible
- (a) A small letter in brackets denotes a footnote to a table
- (1) A number in brackets denotes a footnote to the text
- s.c. Denotes a Dominion Bureau of Statistics import or export statistical class





## THE TARIFF BOARD

---

Reference No. 132

An Inquiry Respecting Wire and Wire Products

---

The letter from the Minister of Finance, dated November 2, 1962, directing the Tariff Board to conduct an inquiry respecting wire and wire products, was quoted in full in Volume 1 of this Report. Volume 1 dealt with steel wire rod, steel wire, and certain wire products.

This volume of the Report deals with wire and wire cloth of non-ferrous metals. It is concerned with the following tariff items in their entirety:

347b	351a
348f	351b
350	351c
350a	353(d)
351	354d

It is also concerned with tariff item 342 in so far as it relates to wire.

A complete list of those who made representations to the Board is contained in Volume 1. Those whose representations more particularly concerned non-ferrous products were as follows:

Air Reduction Canada Limited, Montreal, Que.

Canadian Electrical Manufacturers Association, Toronto, Ont.

Canadian Importers Association Incorporated, Toronto, Ont.

Copperweld Steel Company, Pittsburgh, Pa.

Electronic Components Manufacturers:

Audio Transformer Company Limited, Waterloo, Ont.

Automatic Coil Manufacturing Limited, Toronto, Ont.

General Instrument of Canada Limited, Waterloo, Ont.

Hammond Manufacturing Company Limited, Guelph, Ont.

R.C.A. Victor Company Limited, Renfrew, Ont.

Smallwood, S.G., Limited, Kitchener, Ont.

Standard Television Products Limited, Kitchener, Ont.

Ferro Enamels (Canada) Limited, Oakville, Ont.

Fourdrinier Wire Cloth Manufacturers:

Capital Wire Cloth Limited, Ottawa, Ont.

Johnson Wire Works Limited, Montreal, Que.

Niagara Wire Weaving Company Limited, Niagara Falls, Ont.

Johnson, Matthey and Mallory Limited, Toronto, Ont.

Marsland Engineering Limited, Waterloo, Ont.

National-Standard Company of Canada Limited, Guelph, Ont.

Sterling Cables (Canada) Limited, Montreal, Que.

Wire Cloth, Screening and Netting Manufacturers:

Donald Ropes and Wire Cloth Limited, Hamilton, Ont.

Greening Wire and Perforated Metal Company, Hamilton, Ont.

Greening Metal Products and Screening Equipment Company,  
Hamilton, Ont.

Tyler, W.S., Company of Canada Limited, St. Catharines, Ont.

Wirth Limited, Montreal, Que.



SECTION IELECTRICAL WIRE AND CABLEIntroductionThe Products and their Uses

Nearly all Canadian production of non-ferrous wire and cable is classified for statistical purposes as electrical wire and cable regardless of its actual use. In this Report, the phrase "electrical wire and cable" is used in that broad sense.

This Section is concerned with the following tariff items<sup>(1)</sup> in their entirety:

		<u>B.P.</u>	<u>M.F.N.</u>
350	Wire of all metals and kinds, n.o.p.....	10 p.c.	20 p.c.
Ex.	Copper beryllium alloys, namely: ingots, sheets, plates, strips, bars, rods, tubes and wire.....		7½ p.c.
351	Wire, single or several, covered with any material, including cable so covered, n.o.p.....	20 p.c.	20 p.c.
351a	Wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p.....	17½ p.c.	22½ p.c.
351c	Brass wire for the manufacture of fourdrinier wire or of paper-machine wire cloth.....	Free	15 p.c.
353	Aluminum and alloys thereof: (d) Wire and cable, twisted or stranded or not, and whether reinforced with steel or not.....	Free	22½ p.c.

These items, which encompass wire and cable of non-ferrous metals, derive their importance from the fact that they provide the protection accorded the manufacture of electrical wire and cable in Canada, output of which is estimated to have been valued at about \$200 million in 1964. The wire and cable under consideration consist for the most part of copper and aluminum produced in a wide variety

(1) Order in Council P.C. 1279, dated July 14, 1965 and effective August 23, 1965, provided for a renumbering of the Customs Tariff. This change was made at a time when the work of the Board on Reference 132 was almost finished. For that reason, the previous numbering of tariff items has been retained throughout this Report

of constructions and sold principally for electrical uses. Also included is wire of brass, magnesium, nickel and other non-ferrous metals and alloys. Brass wire is used in the manufacture of wire cloth, fastening devices and other products. Wires of other non-ferrous metals and alloys have a wide variety of specialized applications, of which one example is electrical resistance elements; the market for these wires is highly fragmented and only represents a small part of the total consumption of non-ferrous wires and cables.

A spokesman for the Canadian Electrical Manufacturers Association, hereinafter referred to as C.E.M.A., said there were about 120,000 variations of electrical wire and cable of which about 50,000 were used in Canada in any one year. In the table on the following page, total Canadian factory shipments of electrical wire and cable are grouped in 21 broad classes. It will be noted from the table that nearly one third by value consists of telephone wire and cable. About one fifth consists of power cables including bare aluminum wire and cable, another fifth consists of building wires and about ten per cent consists of magnet wire.

By far the greater part of Canadian output of electrical wire and cable is of kinds specified in tariff item 351. In 1962, when total Canadian factory shipments were valued at \$167 million, shipments valued at \$143 million consisted principally of covered wire as described in that item. The term "covered" includes wire and cable covered with rubber, plastic, paper or other materials. Magnet wire, most of which consists of single bare wire to which successive layers of lacquer have been applied, is also classified under tariff item 351.

Shipments valued at \$16 million in 1962 consisted of bare aluminum wire and cable, including aluminum cable, steel reinforced (A.C.S.R.); such products are classified under tariff item 353(d).

The remaining factory shipments, valued at \$8 million in 1962, consisted of bare wire and cable other than aluminum, and coated wire and cable; these products are covered by tariff items 350, 351a and 351c. Tariff item 350 covers most bare non-ferrous wire in single form other than aluminum, and most single coated wire including aluminum. Coated wire, as distinct from covered wire, includes wire with metallic coatings applied by electroplating or dipping, welding wire with flux coatings, and certain other products not considered as "covered" within the meaning of tariff item 351. The scope of tariff item 351a parallels that of tariff item 350, the former covering multiple filament wire and the latter single wire. Finally, tariff item 351c covers brass wire for the manufacture of fourdrinier wire cloth, which is used on paper-making machines.

Unit selling prices of electrical wire and cable vary widely depending upon the raw materials used, the amounts of processing involved and many other factors. In 1962, when copper cost about 31 cents per pound and aluminum about 24 cents per pound, total shipments of electrical wire and cable were estimated to have been valued at an average price of about 70 cents per pound. Bare wire in heavy gauges may be sold at only a few cents more per pound than the cost of the component metal; on the other hand, copper magnet wire, drawn down to one of the finest sizes and with a number of coatings applied, may sell at more than ten times the cost of the copper.

FACTORY SHIPMENTS OF ELECTRICAL WIRES AND CABLES (ALL INDUSTRIES)1961 and 1962

	<u>Tariff Item</u>	<u>1961 \$'000</u>	<u>1962 \$'000</u>
Telephone Cables: Exchange			
Toll and Toll Entrance	351	28,278	31,318
Telephone Wires, Insulated (Drop Wires, Inside Wires, Other Telephone Wires)	351	8,583	7,509
Telephone Switchboard Wires and Cables	351	6,560	6,736
Television and Radio Wires and Cables	351	1,864	2,577
Telephone Cordage	351	828	746
Bare Wires and Cables (Other than Copperweld and Aluminum)	350 ) 351a)	7,302	7,401
Bare Copperweld Wires and Cables and Copperweld - Copper Strands	350 ) 351a ) 401(f) )	787	538
Bare ACSR and Aluminum Wires and Cables	353(d)	14,043	16,265
Annunciator and Office Wires and Cables	351	278	170
Magnet Wires: Thin Film Insulated		11,758	14,551
Other than Thin Film	351	2,913	3,187
Insulated			
Weather-proof Wires	351	4,621	4,565
Power Cables (Copper or Aluminum Conductors)	351	12,579	14,659
Signal and Control Cables	351	2,582	3,092
Portable and Power Supply Cables	351	1,444	5,083
Building Wires: Non-metallic Sheathed Cables	351	9,799	10,270
Flexible Armoured Building	351	6,042	5,922
Other Building Wires	351	13,621	14,873
Flexible Cords and Fixture Wires	351	3,939	4,068
Service and Service Entrance Cables	351	2,809	3,118
Other Wires and Cables	351	8,971	10,400
		<hr/>	<hr/>
Total		149,602	167,043

---

Source: Dominion Bureau of Statistics, Cat. No. 43-209



The principal electrical applications of electrical wire and cable are indicated in the following table, in which total Canadian factory shipments are classified according to principal use. Although no account is taken of uses other than electrical, nor of imports and exports, the table still provides an indication of the nature of the Canadian market; electrical applications are estimated to account for over 90 per cent of the consumption of electrical wire and cable, and external trade is small.

Canadian Factory Shipments of Electrical  
Wire and Cable, by Principal Uses

<u>Principal Uses</u>	<u>Percentage of Total Value of Canadian Factory Shipments</u>				
	<u>1956</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Communications utilities	24	31	29	31	31
Power utilities	26	21	23	22	19
Construction	20	21	20	19	21
Original equipment manufacturers	23	21	22	21	21
Industrial, including mining and commercial customers	7	6	6	7	8
Total	100	100	100	100	100

Source: Based on D.B.S. statistics and on data collected by C.E.M.A., whose members account for over 90 per cent of production. The value of shipments, as reported under 35 headings by C.E.M.A. members, has been distributed among the five classes of users listed in the table; in most cases the description of the class of wire provided an indication of its principal use. No allowance has been made for non-electrical uses, which account for only a small part of the total

Communications utilities, mainly telephone systems, constitute nearly a third of the market. The power utilities provide the principal market for insulated power cable, aluminum cable steel reinforced (A.C.S.R.), weather-proof wires, signal and control cables and service and entrance cables. The construction industry uses a range of products commonly known as building wires, which includes the wires and cables normally used in wiring houses and other buildings. Original equipment manufacturers in the present context are firms engaged in the manufacture of products incorporating electrical wire and cable; they provide a market for the magnet wire used in electric motors and related devices, and for a wide range of other wires used in electrical appliances and fixtures, electronic equipment, automobiles and a host of other products. Finally, industrial and commercial users provide a market principally for power cable of the kinds used to distribute power within industrial and other large power-using establishments.

The Producers

There is a clearly defined industry in Canada which accounts for most of the production of electrical wire and cable.

Manufacturers of Electrical Wire and Cable,  
Some Principal Statistics

---

	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
Establishments (No.)	28	28	28	25	24
Employees (No.)	6,822	7,026	6,715	6,348	6,834 <sup>(a)</sup>
Salaries and wages (\$'000)	30,235	32,730	31,872	30,467	34,762 <sup>(a)</sup>
Cost at plant of materials used (\$'000)	85,763	99,310	95,021	103,353	115,282
Value added by manufacture (\$'000)	49,964	60,746	58,379	62,185	64,515
Value of factory shipments (\$'000)	137,574	157,225	156,773	162,602	180,218

(a) Includes employees not in manufacturing. On a comparable basis, employment in 1961 was 6,541 and salaries and wages were \$31,504,000.

Source: D.B.S. Cat. No. 43-209

In 1962, of the total value of factory shipments of all products by the industry amounting to \$180 million, shipments of electrical wire and cable amounted to about \$167 million.

The following five firms account for about four fifths of total Canadian output:

	<u>Plant Location</u>
Canada Wire and Cable Company Ltd.	Leaside, Ont. Lancaster, N.B. Montreal East, P.Q. Simcoe, Ont. Fort Garry, Man. Weyburn, Sask. Edmonton, Alta. New Westminster, B.C.

	<u>Plant Location</u>
Canadian General Electric Company Ltd.,	Peterborough, Ont.
Northern Electric Company Ltd.,	Lachine, P.Q.
The Phillips Electrical Company Ltd.,	Woodside, N.S. Brockville, Ont. Montreal, P.Q. Vancouver, B.C.
Pirelli Cables Conduits Ltd.,	St. John's, P.Q.

Canada Wire and Cable and Northern Electric are the two largest producers, together accounting for well over half the total value of Canadian production. Both companies produce a full range of electrical wire and cable, although Northern Electric is by far the largest producer of telephone wires and cables while Canada Wire and Cable is the largest producer of most other broad classes of wire and cable. Phillips Electrical also produces a full range of wire and cable, while concentrating to a marked extent on the production of telephone wire and cable.

A number of other firms, including Canadian General Electric and Pirelli, each produces a broad although not a full range of electrical wire and cable. Canadian General Electric caters mainly to manufacturers of original equipment, industrial and commercial users and the construction industry. Pirelli caters mainly to the construction industry, power utilities and industrial and commercial users. In addition to the five firms mentioned, there are a number of smaller ones each of which produces a limited range of wire and cable.

In the following table certain ratios pertaining to the electrical wire and cable industry are compared with those pertaining to the aggregates of all manufacturing industries.

	<u>Electrical Wire and Cable Industry (1960)</u>	<u>All Manufacturing Industries (1960)</u>
Cost of materials, fuel and electricity used as a percentage of sales value	62	56
Salaries and wages as a percentage of sales value	20	22
Total assets after depreciation as a percentage of sales value	63 <sup>(a)</sup>	73

(a) Relates to the year 1961

Source: Figures for the electrical wire and cable industry compiled from D.B.S. Cat. No. 43-209 and from financial data obtained from the industry by the Board. Figures for all manufacturing compiled from D.B.S. Cat. No. 31-201 and from Department of National Revenue, Taxation Statistics



It will be seen that the electrical wire and cable industry depends more heavily on purchased materials than other industries, and makes somewhat less use of labour and capital.

The industry is heavily concentrated in Ontario and Quebec despite the fact that two of the largest firms have established branch plants in other provinces. Thus, in 1961, of the total number of persons employed in the industry, 54 per cent were in Ontario and 42 per cent were in Quebec; while similar figures for later years are not made public, the distribution has not changed significantly.

### Processes of Production

The production of electrical wire and cable, while simple enough in broad outline, becomes a highly involved undertaking by reason of the complexity of many of the constructions, the wide variety of types in demand and the rigid specifications which must be met.

Four of the manufacturers, namely Canada Wire and Cable, Northern Electric, Phillips and Pirelli, roll copper rods from bars. For present purposes, however, the production of electrical wire and cable may be said to begin with the drawing of wire from rods, principally of copper or aluminum.

The drawing of steel wire has been described in Volume 1 of this Report, and the process of drawing non-ferrous wire is essentially the same. As in the case of steel wire, wire-drawing machines of various sizes are utilized, the large ones for the initial drawing, and smaller ones for further drawing to produce the finer sizes of wire; however, in the non-ferrous the finer sizes represent a much greater percentage of total output. Heat treatment is required, as in the case of steel wire, to remove the brittleness induced by the drawing process.

Many of the numerous and often complex operations subsequent to wire drawing consist essentially of twisting, insulating or testing. A wide range of equipment is required for imparting a variety of twists to many different sizes of wire and cable. In the case of an insulated product, twisting operations may be required both before and after insulation.

The principal materials used as covering for wire and cable are rubber, plastics, paper, yarns, varnish or enamel, and lead. Separate and highly specialized machinery is required for the application of each of these materials. Frequently the application of a particular covering to a cable calls for a different kind of production line than the application of the same material to a single wire.

Rubber covering involves the mixing of ingredients, the application of the rubber to the wire or cable, and curing. Continuous processes have been developed for coating wires of small sizes; the uncured rubber is extruded onto the wire, and the wire is run through a long oven on a continuous basis. For somewhat larger sizes of wire, the rubber may be extruded in the form of a strip and folded around a continuously moving line of wire, which then moves through

the curing oven. High capacity rubber-insulated power cable calls for substantial thicknesses of rubber separating the various wires in the cable. The production of such cable, often in relatively short lengths and to individual specifications, is a much slower process, involving a considerable amount of manual labour and a batch-curing process.

In plastic covering, a manufacturer of electrical wire and cable may mix his own plastics or he may purchase prepared mixtures. Small plastic coated wires, such as the individual wires to be incorporated into overhead telephone cables, can be coated with plastic continuously at high speed by running the wire through liquid plastic and then through troughs of cool water. As in the case of rubber-covered wires, the application of plastics to the larger sizes of wires and cables calls for slower processes.

Paper stripping is widely used as an insulator. The many individual wires in underground telephone cables are usually insulated with a few turns of paper; in the case of very high capacity power cable the paper insulation may be as much as an inch thick. A variety of twisting machines is used for these purposes. Twisting machines may also be used to wind yarn around wire as one layer of insulation or textile jackets may be braided around wires or cables.

The insulation of wire with specially prepared varnishes is desirable where saving of space is important. Most magnet wires have coverings of this sort. While some magnet wire is of heavy gauge, much of it is very fine, and there is a considerable amount of processing in every pound of it. The wire must be run through a bath six or more times, and it must be run through drying areas after each immersion. While this can all be accomplished in one continuous operation, a considerable amount of space, equipment and time is involved.

Lead is sometimes applied as a permanent sheathing for cable, although its use for this purpose has been declining. It is, however, frequently applied as a temporary sheathing to rubber insulated cable in order to compact and vulcanize the rubber.

For the transmission of large blocks of power underground or under water, the use of oil-filled, pressurized cable is increasing. Here again, a considerable investment in highly specialized equipment is required for the production and testing of such cable. Some cables are provided with armour over the insulation. One type of armour consists of steel or aluminum stripping which is wound on the cable with specially designed equipment.

Testing is an important aspect of the production of electrical wire and cable. Some tests are simple and call for very little equipment; for example, the testing of a reel of light insulated wire may require nothing more than connecting each end to an electric circuit for an instant. Other kinds of wire and cable, however, may call for complex and time-consuming tests. It is frequently necessary to immerse cable in baths of water for considerable periods to check water-proofing and other characteristics. Power cables capable of carrying increasingly high voltages are being produced, and they require testing which calls for costly equipment and considerable plant areas.



The MarketGeneral Trends

Statistics pertaining to the market for electrical wire and cable are summarized in the table on the following page.

In considering recent trends, the year 1956 provides a convenient point of departure. In that year consumption reached a record which was not matched until 1962 in terms of volume nor until 1964 in terms of value. The high level of consumption in 1956 was associated with buoyant economic conditions in general and with particularly high capital expenditures on power facilities and other projects calling for large amounts of electrical wire and cable. After 1956 there was some decline in the physical volume of consumption, particularly of insulated power cables and magnet wires. Throughout the years 1957 to 1961, inclusive, consumption in physical terms remained between four and six per cent below that of 1956. In terms of value the decline was sharper, as the prices of wire and cable reflected a drop in the price of copper, which fell from an average of 41 cents per pound in 1956 to a low of 25 cents in 1958; the price per pound averaged 29 cents in 1961. Also, with the decline in demand, domestic competition increased the downward pressure on prices.

Apparent Canadian Consumption of Electrical Wire and Cable

<u>Year</u>	<u>Canadian Consumption</u> \$'mil.	<u>Index of Prices</u> (1956 = 100)	<u>Index of Canadian Consumption at Constant 1956 prices</u> (1956 = 100)
1956	189	100	100
1957	159	87	96
1958	143	80	94
1959	156	86	96
1960	153	86	94
1961	152	85	94
1962	167	85	102
1963	177(a)	87	107(a)
1964	200(a)	93	114(a)

(a) Estimated

Source: Compiled from D.B.S. statistics

Beginning in 1962, growth in the consumption of electrical wire and cable was resumed. Consumption increased during each of the years 1962, 1963 and 1964; in 1964 it was about 14 per cent higher than in 1956, in terms of volume, and five per cent higher in terms of value. Despite increases in wage rates and certain other costs, prices of electrical wire and cable in 1964 were about seven per cent lower than in 1956. This was undoubtedly due in large measure to the fact that copper prices in 1964 were about 20 per cent lower than in 1956; in addition, output per employee was significantly higher in 1964 than in 1956.



THE CANADIAN MARKET FOR ELECTRICAL WIRE AND CABLE

	<u>1951</u>	<u>1956</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
				- thousand dollars -					
<u>Covered Wire and Cable</u>									
Canadian Factory Shipments	94,615	153,324	111,193	127,706	126,164	127,470	142,839	149,000 <sup>(a)</sup>	175,000 <sup>(a)</sup>
Imports	3,285	8,969	6,862	7,056	6,953	6,475	4,254	4,950	6,743
Exports	3,049	6,564	2,075	2,464	4,588	5,262	5,536	6,762	14,222
<u>Bare and Coated Wire and Cable</u> <u>(Excluding bare aluminum)</u>									
Canadian Factory Shipments	15,607	16,907	7,634	9,493	8,618	8,089	7,939	9,000 <sup>(a)</sup>	10,000 <sup>(a)</sup>
Imports	862	1,714	1,083	1,205	1,283	1,265	1,436	1,616	..
Exports	1,462	1,967	220	640	789	617	577	767	1,335
<u>Bare Aluminum Wire and Cable</u> <u>(Including A.C.S.R.)(b)</u>									
Canadian Factory Shipments	13,547	16,288	17,985	13,375	15,014	14,043	16,265	20,000 <sup>(a)</sup>	22,000 <sup>(a)</sup>
Imports	13	666	927	80	46	67	123	209	299
<u>Total</u>									
Canadian Factory Shipments	123,769	186,519	136,812	150,574	149,796	149,602	167,043	178,000 <sup>(a)</sup>	207,000 <sup>(a)</sup>
Imports	4,160	11,350	8,870	8,341	8,282	7,806	5,813	6,777	9,000 <sup>(a)</sup>
Exports	4,511	8,531	2,295	3,104	5,377	5,879	6,113	7,529	15,557
Apparent Canadian Consumption	123,418	189,337	143,389	155,811	152,701	151,530	166,743	177,246 <sup>(a)</sup>	200,443 <sup>(a)</sup>
Imports as per cent of									
Apparent Canadian Consumption	3.4	6.0	6.2	5.4	5.4	5.2	3.5	3.8 <sup>(a)</sup>	4.5 <sup>(a)</sup>

(a) Estimated

(b) Exports of aluminum wire are not published; they are included with "aluminum fabricated materials, n.e.s.", exports of which were valued at \$6.5 million in 1964

Source: D.B.S., Trade of Canada and Cat. No. 43-209

Trends of Canadian factory shipments have been much the same as those of total consumption except that the decline of the former after 1956 and its growth after 1962 were both sharper. The principal reason for these differences was that exports declined proportionately more than consumption between 1956 and 1958, and rose proportionately more between 1958 and 1964. Exports in 1964 were double the previous year, reflecting in part a world shortage of copper. In physical terms, shipments declined by nine per cent between 1956 and 1958 compared with a six per cent decline in consumption, and the increase in the volume of shipments between 1956 and 1964 was 21 per cent compared with 14 per cent increase in consumption.

Canadian external trade in electrical wire and cable is not large in relation to home consumption, as the table on the preceding page shows.

Imports of Electrical Wire and Cable  
By Country of Origin

<u>Year</u>	<u>United Kingdom</u>	<u>West Germany</u>	<u>Japan</u> \$'000	<u>United States</u>	<u>Other</u>	<u>Total</u>
1955	1,395	11	-	4,044	17	5,467
1956	3,700	467	-	7,173	10	11,349
1957	4,458	85	2	4,830	13	9,387
1958	4,116	63	2	4,679	11	8,872
1959	3,312	107	22	4,858	42	8,341
1960	2,377	365	10	5,505	25	8,282
1961	2,582	66	78	5,003	78	7,807
1962	1,005	111	59	4,517	121	5,813
1963	1,349	110	189	4,955	175	6,777

Source: D.B.S., Trade of Canada

In the period since 1955, imports were highest in 1956 when they were valued at \$11 million, equivalent to about six per cent of consumption. In 1964 they were estimated to have been about \$9 million, or less than five per cent of consumption. The United States has been the largest source of imports, and the United Kingdom has been the second largest source. Taken together, these two countries have accounted for over 90 per cent of the value of imports. Japan is now the third largest source; however, in 1963, the last year for which complete statistics were published separately, imports from Japan accounted for less than three per cent by value of all imports and for only one tenth of one per cent of total consumption. On the basis of incomplete statistics, imports from Japan may well have doubled in 1964, but the share of the market supplied by that country remained insignificant.

Exports of electrical wire and cable have been more volatile. Total exports excluding bare aluminum wire and cable fell from \$8.5 million in 1956 to \$2.3 million in 1958, and were valued at \$15.6 million in 1964. While the buoyancy of exports in 1964 was due in part to copper shortages abroad, exports have consistently exceeded

imports since 1962. Moreover, exports of bare aluminum cable, which are excluded from these statistics, are known to have amounted to several million dollars in some years.

### Imports by Tariff Items

About three fourths by value of imports of electrical wire and cable usually consists of covered products which are entered under tariff item 351. The remainder, consisting of bare and coated products, is entered under tariff items 350, 351a, 351c and 353(d). Each of these two broad groups of electrical wire and cable is considered in further detail in the pages which follow.

### Imports of Electrical Wire and Cable, By Types

<u>Year</u>	<u>Covered Wire and Cable (Tariff item 351)</u>	<u>Bare and Coated Wire and Cable (Tariff items 350, 351a, 351c and 353(d))</u>	<u>Total</u>
		\$'000	
1955	4,536	932	5,468
1956	8,969	2,380	11,349
1957	6,870	2,517	9,387
1958	6,862	2,010	8,872
1959	7,056	1,285	8,341
1960	6,953	1,329	8,282
1961	6,475	1,332	7,807
1962	4,254	1,559	5,813
1963	4,950	1,825	6,775
1964	6,743	..	..

Source: D.B.S., Trade of Canada

### Covered Wire and Cable

Imports of covered wire and cable which are entered under tariff item 351, while accounting for about three fourths of the total value of imports, have not usually supplied more than three or four per cent by value of the market for covered wire; in 1964 they are estimated to have supplied 4 per cent of the market. Moreover, exports of covered wire exceeded imports in 1962, 1963 and 1964.

An indication of the kinds of products entered under tariff item 351 is provided by a survey, the results of which are summarized in the following table.



Sample Survey of Imports Entered under Tariff Item 351

	April, May, June 1963
	\$
Television and radio	226,372
Power cables	215,730
Building wire and cable	67,207
Flexible cords and fixture wires	111,320
Magnet and litz wire	36,799
Signal and control cable	5,993
Telephone wire and cable	23,321
Other	531,983
	<hr/>
Total	1,218,725

Source: Department of Industry, Import Analysis Division

It would appear that quite a large proportion of these imports has consisted of wires and cables for use by original equipment manufacturers; this would include the television and radio wire and cable as specified in the above table, and also a large part of the wire included under the description "other". For example, under the description "other" were included thermocouple wire, heater element wire, high temperature resistant wire, and aircraft, automotive and marine wire and cable. Many of these "other" wires and cables are highly specialized kinds for which the Canadian market is relatively small.

Power cable, flexible cords and fixture wires accounted for a large part of the remaining imports recorded in the survey.

A questionnaire was sent to the manufacturers of electrical wire and cable in a further effort to determine what products were affected by competition from imports. Each manufacturer was asked to state, for each class of electrical wire and cable he produced, whether his sales were affected by imports or the threat of imports. The table on the following page shows where, judging by the replies received, most of the imports of covered wire and cable are concentrated.

The available evidence suggests that sales of most insulated wire and cable, including the very large production for telephonic communication and for building construction, are affected very little by imports. The principal competition from the United Kingdom appears to be in insulated power cable, much of it made to order. The costs of labour in manufacturing this kind of cable are relatively high, and the United Kingdom enjoys an advantage in wage rates. However, even in this product, the United Kingdom does not have a large part of the Canadian market. In 1963 total imports of insulated wire and cable of all kinds from the United Kingdom were valued at about one million dollars, whereas Canadian factory shipments of power cable alone in the same year are estimated to have been of the order of \$15 million.



Canadian Factory Shipments of Insulated Electrical Wire  
and Cable, Showing Types of Which Sales  
Have Been Affected by Imports

---

<u>Product</u>	<u>Value of Shipments 1962</u>	<u>Sources of Import Competition</u> <sup>(a)</sup>
Wire and cable apparently not <u>significantly affected by imports</u>	102,960 <sup>(b)</sup>	
<u>Wire and Cable affected by imports</u>		
Insulated power cables	14,659	Japan, U.K., U.S.
Signal and control cables	3,092	Japan, U.K., U.S.
Television and radio wires and cables	2,577	Germany, U.K., U.S.
Flexible cords and fixture wires	4,068	U.S.
Portable and power supply cables	5,083	U.S.
Other wires and cables, including mineral insulated, asbestos covered, rubber and plastic insulated wires and cables not otherwise provided for	10,400	Japan, U.K., U.S.
Sub-total	39,879	
Total factory shipments	<u>142,839</u>	

(a) Import competition is not necessarily distributed according to the magnitude of domestic shipments; data respecting values of imports by sub-groups are not available

(b) Includes some types about which mention of imports into the West Coast were made. Also includes building wires and cables; some firms mentioned imports of building wires and cables, but firms accounting for the greater part of sales reported that imports had no effect on sales

Source: Tariff Board special survey

The ability of the United States to sell wire and cable in Canada appears to be largely in products for which the large home market gives manufacturers in that country an advantage. The Board was told that United States manufacturers enjoyed significant advantages from mass production of relatively low quality products including flexible cords and fixture wires. The imports from the United States of other wire and cable for original equipment can be explained, at least in part, by the fact that a great deal of electrical equipment made in Canada is of United States design.

#### Bare and Coated Wire and Cable

The electrical wire and cable industry produces large volumes of bare and coated wire and cable, mainly of copper, which it retains for use in the manufacture of insulated wire and cable. In addition, smaller but still considerable quantities of bare and coated wire and cable of copper, aluminum and other metals are produced for sale. Statistics pertaining to this latter portion of the market are contained in the table on the following page.

Although details of Canadian factory shipments of bare and coated wire and cable are incomplete, the table indicates that shipments of aluminum have been increasing, and accounted for about two thirds of the total value in 1964. Most uninsulated power transmission lines now consist of aluminum cable, steel reinforced (A.C.S.R.). While shipments of bare copper wire are not available separately, they undoubtedly rank next to aluminum in value; they have, however, declined considerably since 1956, due partly to a drop in the price of copper and partly to the replacement of copper by aluminum. Most of the production of bare copper wire is retained by the manufacturers for further processing into insulated wire and cable, so that it is not recorded in the statistics of shipments of bare wire.

Imports of bare and coated wire and cable have been supplying around five per cent of the market in terms of value. More than half the imports have been entered under tariff item 350 and have come mainly from the United Kingdom and the United States. Imports under the item are known to include resistance wire in a variety of alloys, welding rods and electrodes, solders and wires of zinc and precious metals. A sample survey by the Department of Industry of imports entered under the item in 1964 indicated that wires of nickel, copper or nickel alloys, and welding wires accounted for a substantial part of the total value of imports under the item. The welding wires are not competitive with products of the electrical wire and cable industry. Moreover, many of the alloy wires imported under the item are probably of compositions not produced in Canada. In addition, small amounts of brass and copper wire are imported under the same item.

Imports, mainly from the United States, of twisted, braided and stranded wire, entered under tariff item 351a, amounted to \$548,000 in 1963, and have generally accounted for between a quarter and a third by value of total imports of bare and coated wire and cable. According to the sample survey noted above, imports entered under that item in 1964 consisted largely of copper, copper alloy and aluminum wire and cable; the aluminum products entered under the item are believed to have been coated. Most imports of aluminum wire and cable are entered under tariff item 353(d) as bare, but even these have been negligible in relation to the size of the market in the past few years.

# THE MARKET FOR BARE AND COATED ELECTRICAL WIRE AND CABLE

Tariff Items	1954	1956	1958	1960	1962	1963	1964
	- thousand dollars -						
<u>Canadian Factory Shipments</u>							
Bare Copperweld wires and cables and Copperweld-copper strands	(a) 1,874	858	738	538	..	..	..
Brass and bronze wires and cables	629 (a)	(a)	(a)	(a)	..	..	..
Galvanized steel conductors	548 (a)	(a)	(a)	(a)	..	(b) 22,000	(b)
Bare A.C.S.R. and aluminum wires and cables	11,855	16,288	17,985	15,014	16,265	20,000	22,000
Other	9,384	15,032	6,776	7,880	7,401	..	..
Total	22,416	33,195	25,619	23,632	24,204	29,000	32,000
<u>Imports</u>							
Copper wire, n.o.p.	350	91	186	110	39	42	43
Brass wire for the manufacture of fourdrinier wires or of paper-machine wire cloth	351c	47	1)				
Brass wire, n.o.p.	350	28	94)	131	239	161	182
Wire, non-ferrous, n.o.p. (c)	350	329	775	570	562	872	843
Wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p.	351a	249	658	272	443	361	548
Aluminum wire and cable twisted or stranded or not, and whether (d) reinforced with steel or not	353(d)	825	666	927	46	123	209
Total		1,569	2,380	2,010	1,329	1,559	1,825
<u>Exports excluding Aluminum</u>							
Copper wire and cable (not insulated)		879	1,943	150	278	325	331
Copper alloy wire and cable (not insulated)		95	24	70	510	252	437
Total		974	1,967	220	788	577	768
Apparent Canadian Consumption (Including Exports of Aluminum Wire)							
		23,011	33,608	27,409	24,173	25,186	31,264
							..

(d) Total imports from Britain and dutiable imports from other countries

Source: Trade of Canada and Cat. No. 43-209



## The Competitive Position of the Industry

### Tariffs and Other Factors Impeding Imports

Reference has already been made to the tariff items which cover electrical wire and cable. Insulated varieties, which account for about four fifths of the total value of factory shipments, are dutiable under tariff item 351 at 20 p.c. under both the B.P. and M.F.N. Tariffs. Other varieties are dutiable under tariff items 350, 351a, 351c and 353(d) with British preferential rates from Free to 17½ p.c. and most-favoured-nation rates from 15 p.c. to 22½ p.c.

There are two aspects of the domestic market which tend to reinforce the effects of the Tariff in discouraging imports. One of these relates to differences among countries in safety and other standards relating to electrical wire and cable. The second relates to a variety of circumstances which give some buyers a preference for buying from Canadian manufacturers.

Safety and Other Standards - C.E.M.A. attributed the low level of imports of electrical wire and cable in part to the fact that "... any manufacturer exporting into a foreign country must be prepared to produce goods that meet the standards of the foreign country." (1)

In its recent report, Radio, Television and Related Products, the Tariff Board described the role of the Canadian Standards Association (C.S.A.) in setting safety standards for electrical apparatus. (2) Quite a broad range of wire and cable, including those used in building construction and in original equipment, is covered by C.S.A. standards. The provinces, which have jurisdiction in this area, frequently adopt C.S.A. standards. In cases where no C.S.A. standards apply, specifications may be set by provincial authorities, public utilities or other bodies.

To obtain C.S.A. approval, samples must be submitted for testing. Products manufactured abroad are treated in the same way as Canadian products and many foreign products have in fact been approved. However, a foreign manufacturer would be unlikely to go to the trouble and expense of seeking C.S.A. approval unless he hoped to export to Canada on a continuing basis. Even then, if the specifications of the product he was producing for the home market had to be changed for the Canadian market he might not consider it worthwhile to make such changes. The Board was told that Canadian standards are more comparable with those in the United States than with those in other countries.

Even where wire and cable of kinds not requiring C.S.A. approval are concerned there are often differences in engineering and specifications which make standard foreign products unacceptable in Canada. For example, whereas most European wire sizes are based on the metric system, those in North America are not.

A spokesman for C.E.M.A. made the following statement regarding the effects on differences in standards on the volume of imports:

(1) Transcript, November 13, 1963, p. 1292

(2) Tariff Board, Radio, Television and Related Products, Ottawa, 1965, Cat. No. FT4-123/2

"I don't personally believe that Canadian standards are an effective bar to the importation of wire. I understand, for instance, that 54 American companies are recognized -- approved -- by the Canadian Standards Association to supply flexible cords in Canada. Certain European companies are similarly recognized; and four Japanese companies are similarly recognized; and I think it is fair to say that the testing laboratory of the Canadian Standards Association maintains offices in the United Kingdom, in the Netherlands and in Japan through which manufacturers in these countries may make application for information on our Canadian standardizing body.

"With respect to the specifications, there are naturally differences between Canadian, American and European practice. We do differ in such matters as in the use of the metric scale; we differ in some of the fundamental technology; but I don't believe this constitutes an effective bar to imports from these countries."(1)

It would appear that, while safety and other standards are by no means an absolute barrier to imports, they do constitute an impediment.

Preferences for Canadian Suppliers - Corporate relationships among buyers and sellers, preferences given by many public agencies to Canadian suppliers, and real advantages in buying from domestic sources of supply all assist Canadian manufacturers of electrical wire and cable in competing against imports.

Perhaps the most outstanding instance of a corporate relationship between buyer and seller is the ownership of Northern Electric by the Bell Telephone Company of Canada. There are other corporate relationships among producers and users which tend to favour the production of electrical wire and cable in Canada.

The various levels of government and other public agencies in Canada constitute a significant part of the market for electrical wire and cable. A number of power and communications utilities are owned and controlled by provincial or municipal authorities; moreover, considerable quantities of wire and cable are required for the construction and maintenance of other public facilities. The Federal Government and many public agencies accord preferences of one kind or another to Canadian suppliers. Some of them accord preferences to manufacturers with plants in particular regions. A spokesman for C.E.M.A. stated:

"...nearly every province, take the Atlantic Provinces as a group, certainly have an industrial promotional operation and they encourage you to come in and build a plant and they will see that you get the business. The same thing happens in other areas. Quebec has at the present time encouraged people to manufacture in the Province of Quebec.

---

(1) Transcript, November 14, 1963, p. 1375



British Columbia did it and does not do it -- the conditions change with governments to a certain extent. The net effect is to encourage manufacturers if they want to cover the whole of the Canadian market to establish from coast to coast. Maybe not in every province but in most of them."<sup>(1)</sup>

It was also brought to the Board's attention that similar circumstances exist in other countries. The Board was informed that Canadian exporters frequently find that their products are effectively precluded from competing in other countries.

Aside altogether from preferences of this kind, there are real advantages for many buyers in having Canadian sources of supply of electrical wire and cable. Proven ability to provide dependable products promptly is of considerable importance to many buyers. In many cases buyers are even prepared to pay a premium rather than take any risk, however remote, of unsatisfactory service or performance. A spokesman for C.E.M.A. attributed the small level of imports in part to servicing problems. In this connection, he stated:

"Supplying a market with 120,000 varieties of items creates major servicing and supply problems. Canadian manufacturers are prepared to meet these problems by providing a service, which the Canadian consumer demands, by maintaining large and varied inventories from coast to coast."<sup>(2)</sup>

#### Factors Affecting Costs

In 1962 the manufacturers of electrical wire and cable spent \$115 million on materials and \$35 million on salaries and wages in order to ship finished products valued at \$180 million. These two factors of cost, therefore, amounted to over 80 per cent of the value of shipments. Materials, labour and certain other elements of cost which affect the ability of the Canadian producers to compete with imports are considered below.

Costs of Materials - The table on the following page shows the costs of the principal materials used by the electrical wire and cable industry. In 1962 about 80 per cent of the total cost of materials used consisted of copper, aluminum, rubber and synthetic resins, in the acquisition of which Canadian users are at little or no disadvantage.

Information respecting the prices of copper, aluminum and lead in Canada and elsewhere is contained in Appendix B, Table 2. Some Canadian manufacturers of electrical wire and cable purchase copper in the form of bars which they roll into rods; others purchase rods. Virtually all this copper is purchased from Canadian sources. In recent years, Canadian buyers have paid less for copper by a cent or more per pound than their competitors in the United States, which is the principal source of imports of electrical wire and cable. Buyers in the United Kingdom appear to have been obtaining copper at about the same price as buyers in Canada. Tariff item 348d provides duty-free entry under the B.P. Tariff for copper in bars and rods for use in the manufacture of electrical wire and cable; while there is a duty of 10 p.c. under the M.F.N. Tariff, the B.P. rate is the effective one as far as the Canadian price of copper is concerned.

---

(1) Transcript, November 12, 1963, p. 1162-3

(2) Same, November 13, 1963, p. 1291



Materials Used by Manufacturers  
of Electrical Wire and Cable

	<u>1960</u> \$'000	<u>1961</u> \$'000	<u>1962</u> \$'000
Copper			
Rods	38,566	41,500	54,272
Other	1,229	8,621	2,274
Aluminum			
Rods	13,250	13,920	14,234
Other	2,309	2,560	4,298
Brass and bronze			
Rods	5,560	60	178
Other	38	34	70
Steel			
Wire	3,378	2,973	3,293
Other	1,396	1,636	1,907
Lead	1,511	1,536	1,451
Rubber	1,246	793	2,710
Synthetic resins	9,896	11,297	11,722
Cotton and linen	1,705	2,001	2,956
Insulating paper	1,614	1,538	1,376
Insulating varnishes, japans, enamels and lacquers	974	1,185	1,340
Other materials	<u>12,349</u>	<u>13,699</u>	<u>8,317</u>
Total	95,021	103,353	110,400

Source: D.B.S. Cat. No. 43-209

Aluminum for the manufacture of electrical wire and cable is purchased from Canadian suppliers, principally in the form of rods. Rods are dutiable under tariff item 353(b), duty-free under the B.P. Tariff and 3 cents per pound under the M.F.N. Tariff; this latter rate is equivalent to about 7 p.c. ad valorem. Notwithstanding the duty, aluminum ingots are sold at slightly less in Canada than in Britain or the United States, and the Board received information to the effect that this applies to aluminum rods as well; in fact, the assertion was made that aluminum rods are probably sold in Canada at a lower price than anywhere else in the world.

Crude and unmanufactured rubber, including synthetic rubber, is dutiable mainly under tariff item 616(1), duty-free under the B.P. Tariff and 5 p.c. under the M.F.N. Tariff. The Board heard of no disadvantage faced by Canadian buyers of rubber.

Synthetic resins have become the third largest element in material costs; they are used principally for covering wire; basic resins are generally duty-free or dutiable at 5 p.c. or  $7\frac{1}{2}$  p.c. Most resins are available from Canadian producers at prices little different from those in the United States.

In the case of lead, published statistics indicate that the price in Canada is usually about 20 per cent higher than in the United Kingdom,<sup>(1)</sup> although it is slightly lower than in the United States. Lead in bars and sheets is dutiable under tariff item 338 at 10 p.c. under both the B.P. and M.F.N. Tariffs. The electrical wire and cable industry purchased \$1.5 million of lead in 1962. A substantial part of it was probably used in the production of power cable; as noted in an earlier section, Britain exports power cable to Canada.

Some of the other materials used by industry, including packing, materials, textiles and lacquers are also dutiable. However, the total effect on costs resulting from any higher prices on such materials cannot be great.

Labour Costs - Salaries and wages paid by the electrical wire and cable industry in 1962, which amounted to \$35 million, were equivalent to 19 per cent of the total value of factory shipments.

In 1964 average hourly earnings of employees in the Canadian electrical wire and cable industry were about one fifth less than those of their counterparts in the United States, whence three fourths of our imports of electrical wire and cable come.

On the other hand, average hourly earnings in Canada are double or more those in most European countries. The limited success which those countries have had in selling wire and cable in Canada might be due largely to their advantage with respect to labour costs.

Differences in hourly earnings are, of course, only a rough indication of differences in labour costs per unit of output. Countries with relatively low wage rates tend, for example, to lag behind others in the use of labour saving equipment, and this adversely affects the productivity of their workers.

---

(1) The year 1964 was an exception. Due to unusual market conditions, the price was slightly higher in Britain than in Canada

Average Hourly Earnings

<u>Year</u>	<u>Canada</u>	<u>United States</u>	<u>Earnings in Canada as Per Cent of Earnings in U.S. (%)</u>
	<u>Electrical Wire and Cable Industry</u> (\$ Can.)	<u>Non-Ferrous Wire Drawing and Insulating</u> (\$ Can.)	
1958	1.89	2.18	87
1959	1.96	2.23	88
1960	2.02	2.32	87
1961	2.07	2.47	86
1962	2.13	2.67	80
1963	2.18	2.78	78
1964	2.26	2.90	78

Source: D.B.S. Cat. No. 72-202

United States Department of Labour Bulletin No. 1312-2;  
figures converted to Canadian funds

Problems of Serving a Relatively Small Market - It has already been stated that the United States is the principal source of the relatively small imports of electrical wire and cable. In view of the findings that the Canadian producers are under little disadvantage in the purchase of materials and that hourly earnings are lower in Canada than in the United States, the Board attempted to ascertain if the large size of their home market gave United States producers an advantage over Canadian producers on the Canadian market.

The Canadian market for electrical wire and cable is not small by most standards. In 1963 Canada ranked sixth among the countries of the world with respect to installed electrical generating capacity; it was exceeded in this respect only by the United States, Russia, Britain, Japan and West Germany. Sales of electrical wire and cable in Canada are equivalent in value to about one tenth those in the United States. The huge market in the United States may well provide producers in that country with opportunities for specialization which are not available to Canadian producers.

Representatives of the Canadian producers indicated at the public hearing that there is in fact considerably more specialization among producers in the United States than in Canada. While no direct comparisons of the degrees of specialization in the two countries were made by the Board, the following table contains some indication of the structure of the industry in the United States.



Non-Ferrous Wire Drawing Industry (United States), 1958<sup>(a)</sup>

<u>Industry</u>	<u>Establishments</u> No.	<u>Employees</u> No.
Non-ferrous wire drawing (entire industry)	278	56,493
Copper and copper base alloy wire including strand, bare and tinned for electrical transmission	19	2,771
Other non-ferrous metal wire (including woven wire products) except insulated	18	2,366
90% or more specialization <sup>(b)</sup>	10	784
Communication wire and cable	56	13,915
Appliance wire and cord and flexible cord sets	20	2,655
90% or more specialization	11	425
75-89% specialization	3	124
Magnet wire	25	4,293
90% or more specialization	21	3,227
Power wire and cable	16	8,611
Other insulated wire and cable n.e.s.	70	20,759
90% or more specialization	28	2,335
75-89% specialization	10	8,101

(a) Data collected quinquennially

(b) By "specialization" is meant "specialization in products primary to their industry"

Source: United States Census of Manufactures

In 1958 the average number of employees per plant was larger in Canada than in the United States; there were 244 employees per plant in Canada compared with 203 in the United States. A very large part of Canadian production is in large plants each of which produces a very wide range of products. Indeed, the Board was told that many of the smaller plants in Canada had been established, not for specialization, but rather to meet the demands of regional interest. A spokesman for one company stated:

"Our company has seven plants in Canada, for instance. ... I could add that we could probably make our full product (sic) in probably two or at most three plants, but because of Canada's political economy and being split into the provinces and the encouragement by provinces of manufacturing we find ourselves in the position that in order to take care of the

market we have to be inefficient. It would be much easier and we could be much more efficient if we made everything, say, in Montreal and Toronto and perhaps in Vancouver. Because of the market we cannot do this."<sup>(1)</sup>

At least some of the plants located outside of the main market area of Ontario and Quebec appear, however, to have some economic justification. For example, it seems reasonable to produce A.C.S.R. in British Columbia from aluminum refined at Kitimat; and since Northern Electric has most of the eastern market for telephone wire and cable, the Prairies may well be a logical location for another producer. Once a plant has been established in an area, there probably is justification in broadening its range of products.

Even more striking than the creation of plants to serve particular regions is the multiplicity of facilities to produce each type of wire in the large Ontario-Quebec market area. There are three or more producers of nearly every kind of electrical wire and cable in that area; there are nine producers of A.C.S.R., six of magnet wire, six or seven producers of most types of building wire, seven or eight manufacturers of fixture wire and flexible cord, and four or more manufacturers of virtually every kind of power cable.

On the basis of visits made to a number of plants in Canada and of statements by industry officials, the Board believes that short production runs do add to the costs of producing some kinds of electrical wire and cable in Canada. However, short production runs appear to stem as much from the fact that, at existing levels of tariff protection, a multiplicity of producers has been attracted into the industry as from the fact that the market in the United States is larger. In reply to a question whether the industry competed in price, service and quality in sales of magnet wire, a spokesman for C.E.M.A. made the following statement which relates to the subject of short runs:

"We are competing fundamentally in every one of these. I think in the context of what you are saying we have talked about six manufacturers in Canada -- I think there are only about six in the whole of the United States and just as in other segments of Canadian industry there are more people searching for a small market in Canada in magnet wire as in other wires and cables and this automatically ends up with fierce competition both in quality and quantity. It has the effect of reducing the price level...I don't think any of the companies who manufacture are showing a profit which is needed or is representative of a good healthy manufacturing industry. That is the final answer concerning competition."<sup>(2)</sup>

---

(1) Transcript, November 12, 1963, p. 1162

(2) Same, November 13, 1963, p. 1322



## Prices in Canada and Abroad

An attempt was made to ascertain how the prices of Canadian wire and cable compare with the landed costs of imports. Knowledge of this relation is of interest in assessing the degree to which Canadian prices are governed by the Tariff and the degree to which they are governed by other factors including domestic competition; it also helps in judging the effects which a change in rates of duty might be expected to have on the degree of import competition and on prices in Canada.

The wide variety of products involved, and the number of possible sources of supply, precluded anything like a complete survey. Two separate approaches were taken, however, in order to shed some light on the questions at issue. First, inquiries were made respecting the extent to which the Canadian manufacturers take import competition into account in setting their prices. Second, in view of the fact that the United States is the principal source of imports, an attempt was made to discover how prices in that country compare with those in Canada.

With regard to the first approach, the Canadian manufacturers of electrical wire and cable were asked to reply to a questionnaire in which electrical wire and cable were grouped into 35 classes. They were asked, with respect to each class, if they considered their prices or their volume of sales were significantly affected by imports or the threat of imports. No measure of "significantly affected" was sought and, hence, the replies might reflect considerable differences in interpretation. The results of the survey are summarized in the table on the following page.

The manufacturers were, as the table indicates, by no means all of the same mind on the subject. However, many of the apparent differences in the replies undoubtedly reflect actual differences in experience; for example, some manufacturers are affected much more than others by competition from the United Kingdom in particular kinds of power cable to serve particular markets. However, it is clear that the manufacturers consider actual or potential imports have had much more effect on prices than actual imports have had on volume of sales. Altogether, the results of the survey would seem to indicate that external competition has been regarded as an important, but not the sole, determinant of domestic prices. It would appear that domestic competition has kept many prices below the landed costs of imports. At the public hearing, a spokesman for C.E.M.A. attributed the low level of imports in part to the following factor:

"Strong competition between Canadian manufacturers, forcing prices to levels, in some instances, which are unattractive to importers."(1)

With regard to the second approach, C.E.M.A. and its member companies provided the Board with confidential comparisons of United States and Canadian prices of over 30 different constructions of electrical wire and cable. The particular constructions were chosen from among all the principal broad types of use -- communications, power, construction, industrial, and original equipment. In providing the

---

(1) Transcript, November 13, 1963, p. 1291



Manufacturers of Electrical Wire and Cable

Replies to Questions whether Prices or Volume  
Affected by External Competition

---

	Canadian Factory Shipments 1962 \$'000	Prices (a)		Volume (b)	
		Yes (No.)	No (No.)	Yes (No.)	No (No.)
Telephone Cables:					
Exchange					
Toll and Toll Entrance	31,318	2	2	0	4
Telephone Wires, Insulated (Drop Wires, Inside Wires, Other Telephone Wires)	7,509	3	1	0	4
Telephone Switchboard Wires and Cables	6,736	1	1	0	2
Television and Radio Wires and Cables	2,577	4	1	3	2
Telephone Cordage	746	1	0	1	0
Bare Wires and Cables (Other than Copperweld and Aluminum)	7,401	4	3	1	6
Bare Copperweld Wires and Cables and Copperweld - Copper Strands	538	2	2	1	3
Bare ACSR and Aluminum Wires and Cables	16,265	5	4	2	7
Annunciator and Office Wires and Cables	170	1	6	0	7
Magnet Wires: Thin Film					
Insulated	14,551	4	1	0	5
Other than Thin Film					
Insulated	3,187	5	1	1	5
Weatherproof Wires	4,565	2	6	1	7
Power Cables (Copper or Aluminum Conductors)	14,659	18 <sup>(c)</sup>	17 <sup>(c)</sup>	8	27
Signal and Control Cables	3,092	2	5	1	6

(Cont'd)

## Manufacturers of Electrical Wire and Cable (Cont'd)

Replies to Questions Whether Prices or Volume  
Affected by External Competition

---

	Canadian Factory Shipments 1962 \$'000	Prices <sup>(a)</sup>		Volume <sup>(b)</sup>	
		Yes	No.	Yes	No.
		(No.)	(No.)	(No.)	(No.)
Portable and Power Supply Cables	5,083	4	2	4	2
Building Wires:					
Non-Metallic Sheathed Cables	10,270	7	1	1	7
Flexible Armoured Building	5,922	3	5	0	8
Other Building Wires (Exclusive of types covered by preceding two items)	14,873	7	2	4	7
Flexible Cords and Fixtures Wires	4,068	7	1	5	2
Service and Service Entrance Cables	3,113	1	7	0	8
Other Wires and Cables	10,400	5	3	4	4
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	167,043	88	76	37	123

(a) The principal Canadian Manufacturers of electrical wire and cable were asked for each of 35 sub-classifications of product which they were manufacturing:

"Do you consider that your prices of this product are significantly affected by imports or by the threat of imports?"

(b) The same firms were asked:

"Do you consider that your sales of this product are significantly affected by imports?"

(c) The large number of replies results from the aggregation in this table of eight sub-divisions of power cable in the questionnaire

Source: Survey by the Tariff Board

Board with this material, the manufacturers emphasized that in many cases actual or typical selling prices were uncertain; moreover, prices and price relationships were far from constant over any extended period of time. Also the United States samples were by no means exactly the same as their Canadian opposite numbers in all cases.

While the Board is not at liberty to publish the details of these price comparisons, some general comments can be made. The Canadian prices of some constructions, including certain insulated power cable, were lower than those in the United States. In the cases of certain other constructions, Canadian prices were higher than those in the United States, but not by the full amount of the applicable rates of duty. In still other cases, of which magnet wire is an example, Canadian prices were about equal to the landed cost, including duty, of imports from the United States; in that particular case, the Board was told that prices in the United States were abnormally low at the time.

The evidence from the two approaches which were made, while not permitting quantitative conclusions seems to form a consistent pattern. Prices in Canada appear to be influenced to an important extent by prices abroad, although there are obviously other factors, especially domestic competition, which also affect prices. A change in levels of protection might, consequently, be expected to affect some Canadian prices but not others. On balance, therefore, the effect of a change in protection could be expected to lead to some price adjustments which, on average, would be less than the tariff adjustment.

Judging from remarks made at the public hearing, the reaction of the industry to a reduction in duties would probably be to alter prices where necessary in order to maintain volume of sales. Understandably, the industry appears to be very sensitive to loss of volume. In addition, the prevalence of joint costs makes it very difficult to discover the actual costs of producing any particular construction. A spokesman for the industry stated:

"We are very sensitive to loss of volume. Again I would like to say that the same equipment is used in the manufacture of a lot of magnet wire as is used in the manufacture of other wires and cables. It is very difficult to allocate costs..."<sup>(1)</sup>

And, at another point, he said:

"I am not satisfied, even in my own company, that we have got to the bottom of our costing... the matters are so inter-related that the only way we know really where we stand at the end of the year is when you take away from all the money we take in the money we pay out and we end up with the profit ...We believe we make more profit because we are in the magnet wire business. We would not stay in otherwise..."<sup>(2)</sup>

---

(1) Transcript, November 12, 1963, p. 1145

(2) Same, November 13, 1963, p. 1312



FINANCIAL STATISTICS

	Unit	Manufacturers of Electrical Wire and Cable(a)			All Manufacturing Industries	
		1961	1962	1963	1961	1962(d)
<u>Assets</u>						
Current assets <sup>(b)</sup>	\$'000	57,451	62,747	66,069	8,623,500	9,208,900
Fixed assets <sup>(b)</sup>	\$'000	90,119	93,753	97,179	17,159,900	17,732,800
Other assets	\$'000	1,234	1,668	1,731	986,800	735,900
Total assets before depreciation <sup>(b)</sup>	\$'000	148,804	158,168	164,979	26,770,200	27,677,600
Less - accumulated depreciation <sup>(b)</sup>	\$'000	46,694	51,246	54,959	8,276,900	8,698,800
Total assets after depreciation	\$'000	102,110	106,922	110,020	18,493,300	18,978,800
<u>Profits in Relation to Assets<sup>(b)</sup> or to Sales</u>						
Profit before interest, depreciation, income tax <sup>(c)</sup>	\$'000	15,588	14,346	16,051	2,508,400	2,826,800
-as % of Total assets before depreciation	%	10.5	9.1	9.7	9.4	10.2
-as % of Sales	%	9.1	7.2	7.7	9.9	10.2
Interest charged		1,116	1,066	1,260	227,100	245,000
Depreciation charged		4,647	4,610	4,858	899,200	978,200
Profit before income tax <sup>(c)</sup>	\$'000	9,825	8,670	9,933	1,382,100	1,603,600
-as % of Total assets after depreciation <sup>(b)</sup>	%	9.6	8.1	9.0	7.5	8.5
-as % of Sales	%	5.7	4.4	4.8	5.5	5.8
Sales	\$'000	171,436	198,003	208,961	25,289,400	27,663,100
-per \$1.00 of Total assets after depreciation <sup>(b)</sup>	\$	\$1.68	\$1.85	\$1.90	\$1.36	\$1.46
Value of inventory		36,391	40,445	41,279	4,989,100	5,291,500
Ratio of sales to inventory	\$'000 ratio	4.7	4.9	5.1	5.1	5.2

(a) Includes 11 full companies or electrical wire and cable divisions of companies. In all four years, well over 90 per cent of total Canadian sales is represented

(b) Not including investments

(c) Not including investment income

(d) Not yet available beyond 1962

## Financial Results

Financial statistics pertaining to companies or parts of companies which accounted for well over 90 per cent of total Canadian factory shipments of electrical wire and cable were collected by the Board. These figures, which cover the period 1961 to 1964 inclusive, are presented in the table on the preceding page.

In addition, C.E.M.A. presented the following financial data respecting the "wire and cable portion" of its membership:

### Net Profits as Per Cent of Sales After Income Tax (Percentages)

<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
4.4	1.7	0.8	1.8	1.4	2.1

Source: Transcript, November 13, 1963, p. 1299

While these figures are not strictly comparable with those collected by the Board, they provide an indication of trends in earlier years.

It is clear from the financial data and other evidence available to the Board that the industry experienced a period of abnormally low profits during the period 1957 to 1960 inclusive. Beginning in 1961, however, the industry showed distinct signs of recovery, and the financial results in 1964 reflected this to a very appreciable extent. In that year the companies reporting to the Board showed profits before income tax amounting to \$18 million; this was equivalent to 7.8 per cent of sales and to 15.3 per cent of total assets after depreciation. As is usually the case, the financial results of the companies reporting to the Board have varied considerably; some have consistently made profits while others have experienced losses.

The unsatisfactory financial results achieved by the industry during the years 1957 to 1960 were associated with the relatively depressed state of the market for electrical wire and cable. In addition, a large number of expansion projects were initiated by the industry during and shortly after the period of buoyant demand which culminated in 1956. Eight manufacturers of electrical wire and cable, including all the largest ones and some new entrants to the industry, had total capital expenditures which averaged \$9.8 million annually in the three years 1956, 1957 and 1958; in comparison, total capital expenditures by the same companies averaged only \$3 million in the three years 1960, 1961 and 1962. The expansion programs, which were launched when the market was still buoyant in 1956, were completed at a time when demand had declined. As a result, the industry was faced with a considerable amount of excess capacity. Capacity is a difficult thing to measure in the electrical wire and cable industry, but the manufacturers provided the Board with their best estimates. On the basis of the data submitted, it appears that the industry was operating at about 90 per cent of capacity in 1956, and at as low as 60 per cent of capacity in some of the years between 1958 and 1961. It appears to have operated at around 70 per cent of capacity in 1963, and at a higher level in 1964.



Despite the general improvement in capacity utilization rates, there appears to be a substantial surplus capacity for the rolling of wire rods from copper bars. Four companies have their own rod rolling facilities and, without questioning each manufacturer's judgement respecting his own best interests, the total result is that rod rolling facilities in Canada are only operated at a fraction of capacity.

### Summary

The low level of imports is evidence of the ability of the Canadian electrical wire and cable industry to meet external competition under existing conditions. To the extent that the industry faces import competition, the sources are principally countries entitled to most-favoured-nation treatment, especially the United States. Against imports from those sources, the industry is protected by rates of duty of 20 p.c. or  $22\frac{1}{2}$  p.c. In addition, there are a number of factors peculiar to the market for electrical wire and cable which enhance the protection accorded by the Tariff. These other factors include safety and other standards which differ from one country to another, problems of servicing an extended market with a very large variety of wire and cable, and preferences which some users accord to Canadian manufacturers.

A number of factors affecting the costs of the Canadian producers have been considered. The principal raw materials used by the industry, including copper, aluminum, rubber and synthetic resins are available in Canada about as cheaply, and in some cases more cheaply, than in the United States. While some materials cost more in Canada, the total disadvantage of the industry in the acquisition of raw materials, if any, is small. Wage rates, another important element of cost, are lower in Canada than in the United States, but much higher than in most other countries.

It did not prove possible to compare costs of production in Canada with those in the United States, from whence most imports come. However, to the extent that costs of some varieties of wire and cable in Canada are higher than those in the United States, the principal cause is undoubtedly to be found in the fact that in some cases production can be carried out on a larger scale in the United States. Where Canadian producers are operating at less than full capacity, the reason appears to lie in the multiplicity of plants producing each type of product rather than in the fact that the Canadian market is considerably smaller than that in the United States.

An attempt was made to ascertain whether the Canadian producers were taking full advantage of the Tariff in pricing wire and cable; it was found that the situation varied from one product to another.

With regard to financial results the industry experienced a period of abnormally low profits during the years 1957 to 1960 inclusive. In 1961 profits returned to levels which were more or less typical of manufacturing as a whole. After declining in 1962 and 1963, profits reached a high level in 1964.



### Representations and Proposals

The Canadian Electrical Manufacturers Association made a submission on behalf of the following member companies which manufacture electrical wire and cable:

Canada Wire and Cable Company Ltd., Toronto, Ont.  
 Federal Wire and Cable Company Ltd., Guelph, Ont.  
 Northern Electric Company Ltd., Montreal, Que.  
 Phillips Electrical Company Ltd., Brockville, Ont.  
 Pirelli Cable and Conduits Ltd., St. John's, Que.  
 Pyrotenax of Canada Ltd., Trenton, Ont.  
 Triangle Conduit and Cable (Canada) Ltd., Scarborough, Ont.  
 Canadian General Electric Company Ltd., Peterborough, Ont.  
 Industrial Wire and Cable Company Ltd., Toronto, Ont.

Aluminum Company of Canada Ltd., which is a member of C.E.M.A. and which manufactures electrical wire and cable of aluminum, dissociated itself from the submission. A spokesman for C.E.M.A. said that members of the Association accounted for about 96 per cent of wire and cable production, of which the production of the Aluminum Company of Canada Ltd. represented only a small part.

The Association expressed interest in the following tariff items which are considered in this Section of the Report:

<u>Tariff</u> <u>Item</u>	<u>Summary Description</u>	<u>B.P.</u>	<u>M.F.N.</u>
350	Non-ferrous wire, n.o.p.	10 p.c.	20 p.c.
351	Covered wire, single or several	20 p.c.	20 p.c.
351a	Wire, twisted, braided or stranded	17½ p.c.	22½ p.c.
351c	Brass wire for fourdrinier cloth	Free	15 p.c.
353(d)	Bare aluminum wire and cable	Free	22½ p.c.

With regard to all these items, C.E.M.A. proposed "...that no change be made in existing nomenclature or rates of duty of any of the above tariff items".<sup>(1)</sup> The Association's own summary of its submission is reproduced in Appendix C. The following were the principal reasons cited by the Association in support of its position.

- The Association saw no reason for changing the existing schedule.
- The Association contended that changes could well give rise to administrative difficulties, and that changes should not be made in the absence of very persuasive circumstances.

<sup>(1)</sup> Transcript, November 13, 1963, p. 1287

- the Association contended that changes in the rates on wire and cable should not be made without regard to the rates on the major production materials used by the industry.
- The Association cited trade figures of external trade in wire and cable for seven years which showed a net import balance. It contended that tariff reductions would increase such an imbalance.
- The Association contended that the degree of foreign competition faced by the industry was not fully reflected by the statistics of imports. It said that the impact of foreign competition on prices was felt acutely by the industry.

The submission by C.E.M.A. was the only one pertaining to a broad range of electrical wire and cable which was received. No representations were made by such major users as the power and communications utilities or the construction industry.

One group of original equipment manufacturers made a submission calling for lower duties on magnet wire, which is now provided for in tariff item 351 at 20 p.c. under both the B.P. and M.F.N. Tariffs. The group consisted of the following seven manufacturers of electronic components including small coils and transformers:

Audio Transformer Company Ltd., Waterloo, Ont.  
 Automatic Coil Manufacturing Ltd., Toronto, Ont.  
 General Instrument of Canada Ltd., Waterloo, Ont.  
 Hammond Manufacturing Company Ltd., Guelph, Ont.  
 R.C.A. Victor Company Ltd., Renfrew, Ont.  
 Standard Television Products Ltd., Kitchener, Ont.  
 S.G. Smallwood Ltd., Kitchener, Ont.

Magnet wire is an important component of the coils and transformers made by these companies although, as a spokesman for C.E.M.A. pointed out, this group of manufacturers accounts for only a small proportion of the total consumption of magnet wire in Canada. Specifically, the group proposed the creation of the following two sub-items:

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
Magnet wire	5 p.c.	10 p.c.	20 p.c.
Roughened polyurethane enamelled magnet wire	Free	Free	20 p.c.

The spokesman for the group said that many products in which magnet wire is used are entered under the following tariff items:

Tariff Item	Summary Description	B.P.	M.F.N.
445d	Radio apparatus	Free	20 p.c.
445f	Generators, transformers	15 p.c.	22½ p.c.
445g	Electric motors	15 p.c.	22½ p.c.

He pointed out that the British preferential rates on magnet wire are higher than those on products containing magnet wire. In addition, he contended that, after taking account of the fact that the manufacturers of magnet wire are under no handicap in the purchase of copper, their effective levels of protection on magnet wire were extremely high in relation to the protection enjoyed by the group which he was representing.

Spokesmen for C.E.M.A. opposed the proposal for lower rates on magnet wire on a number of grounds. In addition to objecting to the particular rates proposed, they objected to the idea of differentiating between magnet wire and other electrical wire and cable. They contended that magnet wire was just one of the many products of the industry and that there was no basis for setting different rates for different varieties of insulated wire. Moreover, they rejected as unworkable a definition of magnet wire which the group of electronic components manufacturers had presented; they expressed doubt that a definition could be devised which would clearly distinguish magnet wire from other wire.

The manufacturers of fourdrinier wire cloth proposed that tariff item 351c be left unchanged. The spokesman for the manufacturers indicated that, while they used large quantities of brass wire, they obtained nearly all of it in Canada.

Sterling Cable (Canada) Ltd. sells electrical cable in Canada for its parent concern in Britain, which specializes in the manufacture of custom built power, control and communications cables. Such products are dutiable under tariff item 351 at 20 p.c., B.P. The spokesman for the company stated:

"It is our wish to propose to the Tariff Board that there should be a reduction in the duties now applicable under the British Preferential Tariff, to cable of the types which are of concern to us."(1)

No specific wording to accomplish the objectives of the company was proposed.

Marsland Engineering Limited made a submission respecting brass pinion rods which they import for use in manufacturing small pinions and spur gears for gas meters. The material is imported in lengths of twelve feet and in diameters from 0.150 inch to one inch. As imported, it is cold drawn and has a tooth-edged cross section so that it can be cut into pinions, or spur gears. The product is at

---

(1) Transcript, November 13, 1963, p. 1262



present classified under tariff item 349 at 5 p.c., B.P. and 10 p.c., M.F.N. Its classification depends, however, on whether it is considered to be a rod or a wire; it was previously classified as a wire under tariff item 350 at 10 p.c., B.P. and 20 p.c., M.F.N.

In its submission, Marsland pointed out that the product was not made in Canada, and expressed the wish that it should either be duty-free or at least not made dutiable at a rate exceeding 10 p.c.

The following manufacturers all proposed that tariff item 350 be left unchanged:

Air Reduction Canada Limited

Eleven manufacturers of mechanical springs<sup>(1)</sup>

Four manufacturers of wire cloth other than fourdrinier<sup>(2)</sup>

Air Reduction is a manufacturer of welding electrodes, some of which are dutiable under tariff item 350. The manufacturers of mechanical springs and the manufacturers of wire cloth make some use of the item in importing certain materials for processing.

---

(1) The names of the eleven manufacturers of mechanical springs are listed in the Introduction of Volume 1 of this Report

(2) The four manufacturers of wire cloth other than fourdrinier were:  
 Donald Ropes and Wire Cloth Ltd., Hamilton, Ont.  
 Greening Wire and Perforated Metals Company, Hamilton, Ont.  
 Greening Metal Products and Screening Equipment Company,  
 Hamilton, Ont.  
 The W.S. Tyler Company of Canada Ltd., St. Catharines, Ont.



SECTION IIOTHER NON-FERROUS WIRE

This section is concerned with a number of tariff items providing duty-free entry or low rates of duty for specific kinds of wire and, in one case, of rod. The products involved are, for the most part, not made in Canada.

<u>Tariff Item 342</u>	<u>B.P.</u>	<u>M.F.N.</u>
Phosphor tin and phosphor bronze in blocks, bars, plates, sheets and wire	5 p.c.	7½ p.c.

This item was referred to the Board only in so far as it relates to wire.

Most imports under tariff item 342 consist of phosphor bronze wire; phosphor bronze is an alloy of copper, tin and phosphorus. The wire is used mainly in the manufacture of fourdrinier wire cloth for paper-making machines. In the three years 1961-63, imports under the item averaged 1.2 million pounds with a value of \$778,000.

The largest source of phosphor bronze wire is the United Wire Works Ltd. of Edinburgh. A spokesman for the company stated:

"Over 95% of the Phosphor Bronze Wire imported by Canada from U.K. is for the manufacture of Fourdrinier Wirecloth for the Paper Making Industry. This wire is made by a continuous casting process which is covered by world patents and which was developed in the U.K., primarily to improve the quality of the wire available to the paper machine wire manufacturing industry. The wire is supplied at redrawing sizes ranging from .128" to .040" dia. to the Paper Machine Wire manufacturers in Canada who, in keeping with the normal practice of the industry, redraw it to finished sizes to their individual requirements."(1)

Phosphor bronze wire is now produced by Anaconda American Brass Limited, New Toronto, and by another company as well. Canadian producers were supplying an estimated two-thirds of the market, but production was disrupted in 1965 by a strike at Anaconda.

The retention of tariff item 342 in its present form was proposed by the fourdrinier wire cloth manufacturers, namely:

Capital Wire Cloth Limited, Ottawa  
Subsidiary: Capital Wire Cloth Western Ltd.,  
New Westminster, B.C.

The Johnson Wire Works Limited, Montreal  
Subsidiary: West Coast Wire Works Ltd., Vancouver, B.C.

The Niagara Wire Weaving Company Limited, Niagara Falls  
Subsidiary: Quebec Wires Ltd., Three Rivers, Que.

(1) Transcript, November 8, 1963, p. 897



The Canadian Electrical Manufacturers Association and the United Wire Works Limited also proposed that the item be left unchanged. No opposition to the retention of the item was heard.

<u>Tariff Item 347b</u>	<u>B.P.</u>	<u>M.F.N.</u>
Tungsten rod and tungsten wire for use in Canadian manufactures	Free	Free

This temporary item was introduced in 1951 at the request of Johnson, Matthey and Mallory Ltd. and has been renewed as required since that time.

The company imports tungsten rod which it uses in the manufacture of automotive ignition contact assemblies. In addition, rod and wire are imported under the item by manufacturers of welding electrodes and by others as well. There are two other items in the Tariff under which tungsten wire can be imported duty-free for specified purposes. Tariff item 316b specifies metallic elements for electric lamps; tariff item 445p specifies tungsten and tungsten alloy wire for radio tubes and parts.<sup>(1)</sup>

Tungsten rod is not produced in Canada; tungsten wire in very small sizes only is produced in Canada.

Johnson, Matthey and Mallory Ltd. proposed that tariff item 347b be retained without change. The company stated that tungsten rod comprised 12 per cent of the manufacturing cost of one type of ignition assembly and 30 per cent of the cost of another type. It contended that duty-free entry of tungsten rod was necessary if the manufacture of ignition assemblies was to continue in Canada. The Canadian Electrical Manufacturers Association also proposed that the item be left unchanged.

Hi-Lustre Limited, Perth, Ontario, wrote to the Board requesting that tariff item 347b be left unchanged. This company, along with a number of others, uses tungsten wire not available in Canada for use in the vacuum metallizing process. This is a process for applying thin metallic coatings to objects.

Air Reduction Canada Limited, a manufacturer of welding electrodes, also proposed that tariff item 347b be left unchanged. The spokesman for the company stated:

"We do not believe there is a domestic supplier of tungsten rod and wire and we do not think there is, or will be, sufficient volume in the product to attract domestic production."<sup>(2)</sup>

(1) In its Report on Reference 123, the Board has recommended that the parts and materials now entered under tariff item 445p be provided for in Recommended Item V(b), duty-free under the B.P. and M.F.N. Tariffs. See Tariff Board, Radio, Television and Related Products, Reference 123, Ottawa, 1965, Cat. No. FT4-123/2

(2) Transcript, November 7, 1963, p. 596

Tariff Item 348fB.P.M.F.N.

Copper covered steel wire not less than 0.1875 inch in diameter and copper covered steel rod, for use in the manufacture of trolley, telegraph and telephone wires, electric wires and electric cables

Free 10 p.c.

This item, with some revisions, has been in the Tariff since 1945. It has been used by several manufacturers of electrical wire and cable to import semi-finished products, carrying the trade name Copperweld, which are made in the United States by Copperweld Steel Company.

In finished form, Copperweld is a wire, produced in a wide range of sizes, consisting of a steel core with a heavy covering of copper; the copper usually constitutes 30 per cent or more by weight of the wire. Copperweld is used where the strength of steel, combined with the conductivity and resistance to corrosion of copper, offers advantages. Trolley wires used on urban transportation systems were formerly a major outlet. Copperweld is now used for bare and insulated telephone line wire, electrical distribution wires, railroad communications wire and for other purposes. The Board was informed that the largest outlet was in telephonic communication.

The manufacturing processes involve the insertion of a steel core into a mould, heating it and then pouring molten copper into the mould; the copper becomes permanently welded to the steel core. The resultant product is then rolled down to a wire rod which, in turn, is drawn down into wire of any size.

Most of the imports entered under tariff item 348f, which are made by Northern Electric, Phillips and Pirelli, are in the form of wire 0.1875 inch or more in diameter; these companies then draw the wire down to the sizes required. The rod accounts for over 80 per cent of the cost of the finished wire. In finished form, the wire is dutiable under tariff item 350 at 10 p.c., B.P. and 20 p.c., M.F.N.

Until a few years ago there was no product on the market which was comparable with Copperweld. However, in the 1950's a product sold under the trade name Copperply was introduced in the United States by the parent concern of National-Standard Company of Canada Ltd., Guelph, Ont. In 1960 National-Standard began the manufacture of Copperply at Guelph. Although it is produced in a different way than Copperweld, the two products are very similar, and the Board was told that both had the necessary approvals for use in the same electrical applications. Each company claimed its product was superior to the other, but the Board was told that the two lines were being sold at the same prices in the United States.

The process of making Copperply consists of the electroplating of copper on steel rods, after which the plated rods are drawn down to wire in the required sizes. While there is nothing new in the copper plating of steel, there were technical problems to be overcome



in the economic application of the heavy coating of copper required to produce a product comparable with Copperweld. The Canadian content of the Copperply made at Guelph is almost one hundred per cent.

Tariff item 348f encompasses Copperply as well as Copperweld but, since the former is made in Canada, little if any is imported. Beyond that, the tariff classification of Copperply is different from that of Copperweld, the former being treated as coated or covered steel and the latter being treated otherwise. Finished Copperply wire is dutiable under tariff item 401(f) at 15 p.c., B.P. and 25 p.c., M.F.N.<sup>(1)</sup> If it were not for tariff item 348f, Copperply rod would be dutiable under tariff item 379b at 5 p.c., B.P. and 15 p.c., M.F.N., and Copperweld rod would be dutiable under tariff item 352 at 20 p.c., under both the B.P. and M.F.N. Tariffs.

In the period since 1960 Copperply has come to supply a portion of the Canadian market, although Copperweld still supplies the greater part. Canada Wire and Cable Company Ltd. is a distributor of Copperply, but Northern Electric, Phillips and Pirelli are still importing Copperweld for further processing. At the time of the public hearing the spokesman for National-Standard indicated that his company was very anxious to obtain the account of Northern Electric, which he said was the largest in Canada. He stated:

"...We wish to sell to Northern Electric which, because of the Bell Telephone connection happens to be absolutely the major customer for the uses to which Copperweld and Copperply are both designed, we wish to sell Northern Electric the products of the Canadian factory in Guelph whether it is sold in the form of wire for them to use or whether sold in the form of rod which they can further process into wire."<sup>(2)</sup>

While Copperply and Copperweld in finished form are sold at the same prices in the United States, the prices in Canada of Copperply wire were lower than those of Copperweld at the time of the public hearing. Copperply wire with 30 per cent copper by weight, which accounts for about four-fifths of the total value of sales, was being sold at about the same price in Canada as in the United States, with no advantage being taken of the duty. Copperply with 40 per cent copper by weight was being sold in Canada at a price about 11 per cent higher than in the United States. Copperply rod had not, at the time of the public hearing, actually been sold for further drawing in Canada. It had, however, apparently been offered for sale at a price lower than the landed cost of Copperweld rod.

Officials of the Copperweld Company, Pittsburgh, estimated that the cost of making Copperweld in the United States was of the order of 20 per cent higher than that of making Copperply in Canada. They attributed the difference partly to higher wage rates in the United States and partly to the much higher capital expenditures involved in the production of Copperweld.

(1) In the first Volume of this Report the Board has recommended rates of 5 p.c., B.P. and 10 p.c., M.F.N. for coated or covered single wire of iron or steel, which would include Copperply. See Recommended Item II(c)

(2) Transcript, November 12, 1963, p. 1185



While complete statistics of the Canadian market for Copperweld and Copperply wire are not available, total shipments in finished form would be between one and two million dollars in value, of which Copperweld would still account for the greater part. Imports of Copperweld rod and wire entered under tariff item 348f from the United States have been approximately as follows:

Imports: Copper covered steel wire and rods, and copper in bars or rods, for the manufacture of trolley, telegraph and telephone wires, electric wires, electric cables, and electrical conductors, s.c. 6044; Tariff Items 348d and 348f

---

<u>Year</u>	<u>'000 lb.</u>	<u>\$'000</u>
1955	2,317	722
1956	3,653	1,345
1957	3,141	1,073
1958	2,975	1,010
1959	2,833	1,028
1960	2,726	979
1961	2,363	884
1962	1,713	688
1963	2,124	891

These imports would all subsequently have been further processed in Canada by drawing, and a substantial volume of the resultant wire would then have been insulated.

National-Standard Company of Canada Ltd. expressed opposition to the continuance of tariff item 348f in its present form. The company proposed that the item 348f be revised as follows:

Copper-covered steel wire or rod, not  
more than 0.340 inch in diameter

Rates of not less than 10 p.c., B.P. and 20 p.c., M.F.N. were proposed.

The spokesman for National-Standard made it clear that the purpose of the proposal was to try to induce Northern Electric and other manufacturers, now importing Copperweld for further processing, to buy Copperply manufactured at Guelph. In addition, he contended that in view of the small proportion of value added by the final drawing process, there was no need for higher rates of duty on the wire than on the rod.

Neither the Canadian Electrical Manufacturers Association nor those of its member companies which are importing Copperweld took any stand at all with respect to the duties on Copperply and Copperweld.

The Copperweld Steel Company of Pittsburgh presented a submission in which it proposed that tariff item 348f be left unchanged.

<u>Tariff Item 350a</u>	<u>B.P.</u>	<u>M.F.N.</u>
Electric resistance strip, ribbon, wire and wire cold rolled after drawing, containing from nineteen per cent to twenty-six per cent chromium, three per cent to seven per cent aluminum, one-half per cent to four per cent cobalt, and remainder iron	Free	Free

This tariff item describes a particular kind of resistance strip or wire known as Kanthal which is produced by a company in Sweden. Products competitive with Kanthal are classified elsewhere in the Tariff. Certain kinds of alloy metal bars, rods and strip are entered duty-free under tariff items 355b and 356b. Most resistance wire is classified under tariff items 350 at 10 p.c., B.P. and 20 p.c., M.F.N. Some resistance wire for radio and related apparatus, when of a class or kind not made in Canada, is classified under tariff item 4450(3), duty-free under the B.P. and M.F.N. Tariffs.<sup>(1)</sup> As far as is known, no resistance alloys are melted or hot-rolled in Canada, but wire in certain sizes and specifications is produced in Canada from imported rods.

Ferro Enamels (Canada) Limited, the sales agent in Canada for the producer of Kanthal, requested that tariff item 350a be left unchanged. C.E.M.A. made a similar proposal. Subsequent to the public hearing, the Board heard from another importer who complained that the item was discriminatory in that it singled out one particular make of resistance wire for special tariff treatment.

Four manufacturers of wire cloth also proposed that tariff item 350a be left unchanged.

Total duty-free imports from Sweden under the relevant import statistical class were valued at \$23,988 in 1963.

<u>Tariff Item 354d</u>	<u>B.P.</u>	<u>M.F.N.</u>
Aluminum or aluminum alloy covered aluminum alloy wire or rod, 0.375 inch or less in diameter, for use in the manufacture of wire less than 0.25 inch in diameter	Free	Free

The product encompassed by this item consists of a core of aluminum alloy compounded for higher tensile strength, and covered with pure aluminum. It is not made in Canada and is imported from the United States, principally by manufacturers who draw it to finer sizes

(1) In its Report on Reference 123 (op. cit.) a number of the Board's recommendations, including Recommended Item II(c), would provide continued duty-free entry for at least some of the resistance wire now classified under tariff item 4450(3)

for use in aluminum insect screening. The production of aluminum insect screening has been increasing, and imports entered under tariff item 354d have undoubtedly increased as well; in 1964 imports under the item are estimated to have been about \$300,000. This figure was arrived at by computing duty-free imports from the United States reported under s.c. 451-09.

The only representation made respecting this item was by the Canadian Electrical Manufacturers Association which proposed that it be left unchanged. Subsequent to the public hearing, Greening Industries Limited of Hamilton, Ontario, expressed a desire that the item be left unchanged.





SECTION IIIWIRE CLOTH OF BRASS OR COPPER

Wire cloth of brass or copper is provided for in tariff item 351b, which is as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
351b Wire cloth or woven wire of brass or copper	17½ p.c.	20 p.c.

In terms of the value of the market, the principal kind of wire cloth covered by this item is fourdrinier wire cloth which is used on paper-making machines. Some wire cloth of brass or copper is also used for other industrial purposes. Insect screening of brass or copper is covered by tariff item 351b, as well, although most insect screening is now made of aluminum or fibre glass.

Fourdrinier Wire Cloth - Fourdrinier wire cloth is used in the form of endless belts on paper-making machines. It is made on specially designed machines which are similar in principle to those used in the weaving of textiles. A feature which distinguishes fourdrinier wire cloth machines from other wire cloth machines is that the former are capable of weaving cloth over 60 inches in width, whereas the latter are not. The Board was told that fourdrinier wire cloth machines weigh as much as 50 tons.

Fourdrinier wire cloth is produced to order in a variety of meshes and widths. After it has been woven, the cloth must be prepared for seaming into an endless belt, so that one end of each warp wire can be butt-welded to its opposite end. Once the cloth has been welded into an endless belt, it is classified under tariff item 427(6) at 10 p.c., B.P. and 22½ p.c., M.F.N., as a part of a paper-making machine.

Fourdrinier wire cloth is made by the following firms in Canada:

Capital Wire Cloth Ltd., Ottawa

Subsidiary: Capital Wire Cloth Western Ltd.,  
New Westminster, B.C.

The Johnson Wire Works Ltd., Montreal

Subsidiary: West Coast Wire Works Ltd., Vancouver

The Niagara Wire Weaving Company Ltd., Niagara Falls

Subsidiary: Quebec Wires Ltd., Three Rivers, Que.

Factory shipments of fourdrinier wire cloth have been valued at between \$11 and \$13 million annually in recent years. Imports of fourdrinier wire cloth under tariff items 351b and 427(6) were valued at \$566,402 in 1964; exports were valued at \$470,350.

The principal raw materials used in the manufacture of fourdrinier wire cloth are phosphor bronze wire and brass wire. As noted in a previous section of this Volume, phosphor bronze wire is imported from Britain under tariff item 342 at 5 p.c., B.P. The brass wire is obtained largely in Canada; it is dutiable under tariff item 351c, Free, B.P. and at 15 p.c., M.F.N.

Other Wire Cloth and Screening - Wire cloth, other than fourdrinier wire cloth, and screening are produced by other manufacturers equipped with looms under 60 inches in width. The greater part of the production by these manufacturers consists of steel wire cloth and aluminum insect screening, neither of which is encompassed by tariff item 351b.<sup>(1)</sup>

Canadian factory shipments of non-ferrous metal wire cloth, other than fourdrinier, including insect screening, averaged \$891,000 annually during the three years 1961 to 1963, inclusive; possibly half of this amount was accounted for by shipments of aluminum insect screening. In 1962, the last year for which separate records were kept, imports of brass and copper wire cloth amounted to \$252,000 coming mainly from the United States.

Proposals - The fourdrinier wire cloth manufacturers proposed that no change be made in tariff item 351b.

The following four principal manufacturers of other wire cloth of brass and copper also proposed that there be no change in rates:

Donald Ropes and Wire Cloth Ltd., Hamilton, Ont.  
 Greening Wire and Perforated Metal Company, Hamilton, Ont.  
 Greening Metal Products and Screening Equipment Company,  
 Hamilton, Ont.  
 The W.S. Tyler Company of Canada Ltd., St. Catharines, Ont.

C.E.M.A. proposed that the item be left unchanged. The Canadian Pulp and Paper Association and the Council of the Forest Industries of British Columbia both made submissions; while neither made specific reference to tariff item 351b, they sought no changes in any of the items brought before the Board. Wirth Limited, an importer, proposed rates of 15 p.c., B.P. and 20 p.c., M.F.N., for tariff item 351b; in addition, the company suggested the insertion of the words "endless or not" in order to provide for the fourdrinier wire in finished form which is now classified under tariff item 427(6) at 10 p.c., B.P. and 22½ p.c., M.F.N.

---

(1) Steel wire cloth is discussed in Volume 1 of this report







## SUMMARY AND CONCLUSIONS

This second volume of the Board's report on Wire and Wire Products deals only with non-ferrous wire and wire cloth; in fact it is largely concerned with electrical wire and cable.

In 1964, the electrical wire and cable produced in Canada had a value of about 200 million dollars. While there are about 17 producers in Canada, two of them, Canada Wire and Cable and Northern Electric, together account for over 50 per cent of total production, and three other producers account for another 30 per cent. There are, in addition, a dozen or so very much smaller producers with an average value of production of about two million dollars annually, and there is a complex pattern of competition and specialization in the products of the large and small companies.

Over the past decade, Canadian producers have supplied about 95 per cent of total domestic consumption; moreover, some imports are of specialty items not competitive with Canadian production. As a result, imports have had little effect on the industry, at least as far as the volume of its output is concerned. The industry did, however, complain that pricing was extremely competitive, especially on large orders, and that producers in Canada, in order to get sufficient volume of production, were forced to bid on many projects at unattractive prices. The sources of price competition are partly domestic and partly external.

Much of the industry's production is used in construction of one kind or another and has a long life expectancy. Consequently, the industry is quite sensitive to changes in the level of capital expenditures. In the first decade after World War II, with the rapid expansion of capital expenditures and, in particular, in response to some very large projects in power and communications and in defence and other government requirements, plant capacity in the electrical wire and cable industry was very greatly expanded. For a number of years after 1956, the market for electrical wire and cable was comparatively depressed with the result that the industry operated well below capacity and profits in the industry were low. Conditions, however, have improved considerably in more recent years permitting better utilization of the capacity installed a number of years ago. Financially, in the past three or four years, the industry has shown profits comparable to those for all manufacturing industries; in 1964 profits before income tax in the industry amounted to 16 per cent of total assets after depreciation.

Any assessment of the competitive position of the Canadian industry is hampered by its complex nature and the wide variety of products which must be produced, many to meet special, critical specifications.

Materials account for over 60 per cent of the sales value of the wire and cable industry. The basic raw materials are non-ferrous metals, particularly aluminum and copper. With the exception of the Aluminum Company of Canada Limited, the primary producers of non-ferrous metals are not in the wire and cable business. Rather they supply copper bars to four manufacturers of wire and cable who have



rod rolling facilities, and these in turn supply copper rod to the other producers of wire and cable. On these basic materials the industry is not at any appreciable disadvantage in basic material costs. However, with respect to other materials such as lacquers, paints, plastics and packaging, the industry is at some disadvantage.

Wage rates in the Canadian industry are higher than in most countries though a comparison of labour costs per unit of output is difficult to make. The Board was informed that lower labour costs per unit of output in the United Kingdom and some other countries were a particularly important factor in supplying the Canadian market for certain types of heavy power and communications cable which are relatively labour intensive. Also, lower labour costs, in spite of higher wage rates, and lower overhead costs per unit of output were said to offer U.S. producers a competitive advantage in some lines of standard wire and cable where the Canadian disadvantage stemmed primarily from shorter runs and consequently more "down" time. This problem of short runs, however, is aggravated by the multiplicity of plants in Canada producing each principal type of wire and cable. Plant and equipment costs are also likely to be somewhat higher in Canada than in some other countries.

While costs, then, in total, may be higher in Canada, there exist several factors, in addition to the tariff, which partially offset cost disadvantages and favour domestic producers. Canadian electrical standards offer some advantage to producers in this country. A fairly large part of the industry's sales is made to various levels of government and to public utilities and, for the most part, such purchasers follow a policy of giving some preference to goods produced in Canada, even if this involves somewhat higher prices. Canada is not alone in this respect; in fact, other barriers were mentioned by the industry as being more effective than the tariff itself in controlling Canadian exports to some countries. However, "buy Canadian" policies have been a mixed blessing to the industry since some provinces have adopted "buy within the province" policies as well; this has led to some duplication of production facilities which, under purely economic considerations, would not have taken place.

Another aspect of production of wire and cable, which is common to most countries, is that a fairly large proportion of production is for captive use by the producing company or for sale to an affiliated company; this feature tends to permit more orderly production schedules. It might also be noted that in recent years the Canadian industry has achieved a level of exports of the same general order of magnitude as the imports of electrical wire and cable though, of course, the distribution among products is different.

Having regard to all the foregoing, the Board concluded that the existing levels of tariff protection were somewhat higher than required to promote efficient production. In this connection it should be mentioned that since "value added" is not much more than 50 per cent of material costs and the duty on materials is quite low, the effective protection on the value added by the industry is considerably greater than the rates of duty on the end products.

The rates of duty recommended by the Board on electrical wire and cable are compared with existing rates in the following table.

Recommended Wording	Existing Item	Existing Rates		Recommended Rates	
		B.P.	M.F.N.	B.P.	M.F.N.
IV(a) Single, not coated or covered, n.o.p.	350 353(d)	10 p.c. Free	20 p.c. ) 22½ p.c. )	7½ p.c.	12½ p.c.
IV(b) Single, coated or covered	350 351 354d	10 p.c. 20 p.c. Free	20 p.c. ) 20 p.c. ) Free )	10 p.c.	15 p.c.
IV(c) Twisted, braided, bunched or otherwise conjoined, whether or not reinforced with steel, coated or covered or not, including cable, rope and strand	351 351(a) 353(d)	20 p.c. 17½ p.c. Free	20 p.c. ) 22½ p.c. ) 22½ p.c. )	12½ p.c.	17½ p.c.

About three fourths by value of imports are normally entered under tariff item 351, and an even higher proportion of Canadian production consists of goods described in that item. In 1963, the United States supplied about 70 per cent of the imports entered under tariff item 351, and the United Kingdom supplied about one fifth. Nearly all these imports would have been dutiable under Item IV(c) in the Recommended Schedule, involving a reduction of 7½ percentage points in the B.P. Tariff and 2½ percentage points in the M.F.N. Tariff. It will be noted, however, that the recommendations respecting single wire would involve larger reductions in the M.F.N. Tariff than in the B.P. Tariff.

The recommended rates are somewhat higher than in the case of iron or steel wire. The Board considers this to be warranted; firstly, the electrical wire and cable industry appears to be more subject to the relative disadvantages arising out of short runs and multiplicity of products and, secondly, the existing rates on non-ferrous wire are higher than those on wire of iron or steel.

Wire cloth or woven wire of brass or copper is the only wire product involved in this volume. Most of the wire cloth produced in Canada consists of fourdrinier wire cloth which is used on paper-making machines in the form of an endless belt. These belts are made in the exact length required to fit the machine on which they are to be used and are classified for customs purposes as parts of paper-making machines under tariff item 427(6) at rates of 10 p.c., B.P. and 22½ p.c., M.F.N. Under the Board's recommendation, fourdrinier cloth, whether in endless belts or not, would fall under Recommended Item V at rates of B.P. 12½ p.c. and M.F.N. 17½ p.c. Fourdrinier wire cloth is a product of considerable volume and in most cases the principal product of those producing it. In the opinion of the Board, it should be dutiable as a product rather than as part of a machine.

Another matter which bears mentioning is the definition of wire. Wire has not been defined in the Customs Tariff nor is there a generally recognized definition in industry. The Board is recommend-

ing that definitions for wire of iron or steel, of copper or copper alloys and of aluminum or aluminum alloys, be inserted in the Customs Tariff. For the most part, the definitions follow what has in fact been the practice of the Customs administration.



RECOMMENDED SCHEDULE AND DEFINITIONS

Note: This schedule is complementary to that in Volume 1 which contains Recommended Items I to III.

1. That the following definitions be added to section 2, subsection (1) of the Customs Tariff:

"Wire of iron or steel" means a drawn, non-tubular product:

- (a) of any cross-sectional shape or dimension if in coils;
- (b) if in straight cut lengths, with a maximum cross-sectional dimension of 0.50 inch;
- (c) if cold-rolled flat, with a maximum width of 0.50 inch, in coils or in straight cut lengths.

"Wire" when applied to copper or alloys of copper containing fifty per cent or more by weight of copper means a drawn non-tubular product of any cross-sectional shape, in coils or cut to length and not over 0.50 inch in maximum cross-sectional dimension. The term also includes a product of solid rectangular cross-section in coils or cut to length, cold-rolled after drawing and not over 1.25 inch in width nor over 0.188 inch in thickness.

"Wire" when applied to aluminum or aluminum alloys means a non-tubular product of round, rectangular, hexagonal or octagonal cross-section in coils, whose maximum cross-sectional dimension is not over 0.50 inch.

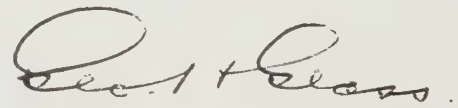
2. That tariff items 347b, 348f and 350a remain unchanged.
3. That the following tariff items, enumerations of goods and rates of duty be revoked by Order in Council or deleted by amendment of Schedule A to the Customs Tariff: 342, 350, 351, 351a, 351b, 351c, 353(d) and 354d, and that the following extract from tariff items 349a, 350 and 711 be struck out:

Most-Favoured-Nation Tariff

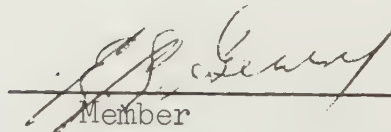
Copper beryllium alloys, namely:	
ingots, sheets, plates, strips,	
bars, rods, tubes and wire.....	7½ p.c.

and that Schedule A be further amended by inserting therein the following items, enumerations of goods and rates of duty:

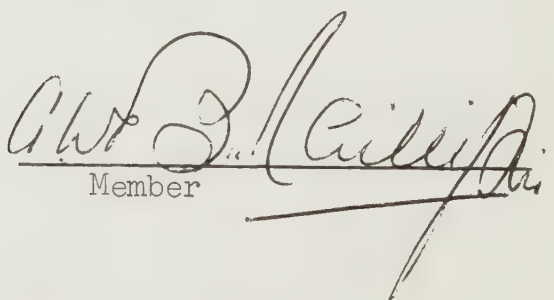
Tariff Item	Goods Subject to Duty and Free Goods	British Preferential Tariff	Most-Favoured-Nation Tariff	General Tariff
342	Phosphor tin, phosphor copper and phosphor bronze in blocks, bars, plates, sheets, strips, rods and wire.....	5 p.c.	7½ p.c.	10 p.c.
342b	Copper beryllium alloys, namely: ingots, sheets, plates, strips, bars, rods, tubes and wire.....	7½ p.c.	7½ p.c.	35 p.c.
IV	Wire of all metals or alloys thereof, n.o.p.:			
	(a) single, not coated or covered.....	7½ p.c.	12½ p.c.	25 p.c.
	(b) single, coated or covered	10 p.c.	15 p.c.	25 p.c.
	(c) twisted, braided, bunched or otherwise conjoined, whether or not reinforced with steel, coated or covered or not, including cable, rope and strand...	12½ p.c.	17½ p.c.	25 p.c.
V	Wire cloth or woven wire including fourdrinier wire cloth, endless or not, of copper or alloys of copper containing 50 p.c. or more by weight of copper.....	12½ p.c.	17½ p.c.	25 p.c.



First Vice-Chairman



Member



Member

Ottawa, October 19, 1965.

NOTES ON DEFINITIONS AND RECOMMENDED ITEMS

relating to wire and wire products of metals other than iron or steel

Recommended Definitions of Wire

"Wire of iron or steel" means a drawn, non-tubular product:

- (a) of any cross-sectional shape or dimension if in coils;
- (b) if in straight cut lengths, with a maximum cross-sectional dimension of 0.50 inch;
- (c) if cold-rolled flat, with a maximum width of 0.50 inch, in coils or in straight cut lengths.

"Wire" when applied to copper or alloys of copper containing fifty per cent or more by weight of copper means a drawn non-tubular product of any cross-sectional shape, in coils or cut to length and not over 0.50 inch in maximum cross-sectional dimension. The term also includes a product of solid rectangular cross-section in coils or cut to length, cold-rolled after drawing and not over 1.25 inch in width nor over 0.188 inch in thickness.

"Wire" when applied to aluminum or aluminum alloys means a non-tubular product of round, rectangular, hexagonal or octagonal cross-section in coils, whose maximum cross-sectional dimension is not over 0.50 inch.

The Tariff has not contained a definition for wire, nor is the term used with a consistent meaning in industry. On occasion this has been the source of some difficulties.

The recommended definitions follow fairly closely what has in fact been the practice in administering the Customs Tariff.

For tariff purposes, wire is now deemed to be a drawn product not more than one-half inch in diameter when in the coil; for straight lengths the size limitations are different in some cases. In addition, iron or steel, cold-rolled flat after drawing, when not more than .25 inch in width and not less than .1875 inch in thickness is deemed to be wire by virtue of tariff item 401(c).

The principal changes which would result from the recommended definitions relate to products cold-rolled after drawing. Such products, when within the specified range of sizes, would be classified as wire whereas now some of them may be classified otherwise; for example, as manufactures of brass or copper under tariff item 352. In addition, another change with respect to wire of aluminum and aluminum alloys would be that it would not be restricted to a drawn product. However, it is not considered that any significant portion of trade or production would be affected.

The Board consulted with the domestic industry and also considered the definitions used in the Tariffs of other countries. The recommended definition for wire of iron or steel is, in effect, that



recommended by Dosco and Stelco. The definitions recommended for wire of copper or alloys of copper and aluminum or alloys of aluminum, are also similar in most respects to those recommended by the industry with the exception that the industry recommended a maximum cross-sectional dimension of 0.375 inch whereas the Board is recommending 0.50 inch. Price lists and handbooks issued by the industry suggest that, for both copper and aluminum, the American Wire Gauge is generally used, at least on this continent, and the sizes range from 40 to 4/0, the latter denoting the largest size which is .4600 inch in diameter. The figure of 0.375 inch proposed by the industry is that used in the United States Tariff but it would exclude the two largest wire sizes, 3/0 and 4/0. However, it is understood that these large sizes are not produced or traded in significant quantities. On balance, the Board considered it preferable to recommend a definition which would include these two largest wire sizes.

Iron or steel, copper, aluminum and their alloys are the principal metals used in the wire industry. With respect to wires of other metals, the Board was not made aware of any reason for departing from the definition at present followed by the Customs authorities, namely, a drawn product with a maximum diameter of 0.50 inch.

#### Recommended Item 342

342 - Phosphor tin, phosphor copper and phosphor bronze in blocks, bars, plates, sheets, strips, rods and wire

5 p.c.

7½ p.c.

10 p.c.

This item would continue at the same rates of duty the provisions of existing item 342. Changes in wording are recommended mainly for clarification and in view of the Board's recommended definition of non-ferrous wire. With regard to the recommended inclusion of phosphor copper, the Board is informed that this product has in fact been allowed entry under the existing item. The recommended addition of strips and rods is partly to take account of the recommended definition of wire and partly because there appears to be no reason for excluding these particular shapes from the item.

#### Recommended Item 342b

342b - Copper beryllium alloys, namely: ingots, sheets, plates, strips, bars, rods, tubes and wire

7½ p.c.

7½ p.c.

35 p.c.

Recommended Item 342b is a continuation without change of item Ex. 350. Wire of copper beryllium is used primarily for the manufacture of welding electrodes and switchgear parts where heavy service is demanded, and is not produced in Canada.

#### Recommended Item IV

IV - Wire of all metals or alloys thereof, n.o.p.

(a) single, not coated or covered

7½ p.c.                      12½ p.c.                      25 p.c.

(b) single, coated or covered

10 p.c.                      15 p.c.                      25 p.c.

(c) twisted, braided, bunched or otherwise conjoined, whether or not reinforced with steel, coated or covered or not, including cable, rope and strand

12½ p.c.                      17½ p.c.                      25 p.c.

Recommended item IV(a) would provide for the uncoated wire now entered under item 350 at a British preferential rate of 10 p.c. and a most-favoured-nation rate of 20 p.c.; it would also provide for the brass wire now entered under item 351c duty-free under the British Preferential Tariff and at a rate of 15 p.c. under the Most-Favoured-Nation Tariff and for single aluminum wire now entered under item 353d duty-free under the British Preferential Tariff and at 22½ p.c. under the Most-Favoured-Nation Tariff.

Item IV(b) would provide for the coated wire now entered under item 350 and for the single coated or covered wire now entered under item 351 at rates of 20 p.c. under both the British Preferential Tariff and the Most-Favoured-Nation Tariff. It would also provide for the aluminum alloy wire now entered under item 354d duty-free under both the British Preferential and Most-Favoured-Nation Tariffs.

Item IV(c) would provide for wire other than single now entered under item 351 at 20 p.c. under both the British Preferential and Most-Favoured-Nation Tariffs, the twisted, braided or stranded wire now entered under items 351a at 17½ p.c., B.P. and 22½ p.c., M.F.N. and the twisted or stranded aluminum wire now entered under item 353d, Free, B.P. and at 22½ p.c., M.F.N.

In 1963 imports of wire which would be covered by Recommended Item IV were valued at about \$7 million and duties collected amounted to \$1.3 million. Of these totals, imports from the United Kingdom amounted to \$1,351,000 and duties collected to an estimated \$242,000 an average of 17.9 p.c., ad valorem. Imports from countries entitled to most-favoured-nation treatment amounted to \$5,688,000 and duties collected to \$1,097,967, an average of 19.3 p.c., ad valorem.

It is estimated that 90 per cent or more of imports by value has been of types described in Recommended Items IV(b) and IV(c), the remainder having been of types described in Recommended Item IV(a). Had the Recommended Items been in effect in 1963, the duties collected on the imports of that year from the United Kingdom would probably have been equivalent to between 10 p.c. and 12½ p.c., and the duties collected on imports from countries entitled to most-favoured-nation treatment would probably have been equivalent to between 15 p.c. and 17½ p.c., ad valorem. The changes in rates would have meant a reduction of about \$90,000 in duties collected on imports from the United Kingdom and a reduction of about \$200,000 in duties collected on imports from countries entitled to most-favoured-nation treatment.

Recommended Item V

V - Wire cloth or woven wire including fourdrinier wire cloth, endless or not, of copper or alloys of copper containing 50 p.c. or more by weight of copper

12½ p.c.

17½ p.c.

25 p.c.

This item would provide for the wire cloth now entered under item 351b at rates of 17½ p.c., B.P. and 20 p.c., M.F.N.

It would attract fourdrinier wire cloth now entered as 'parts' under existing item 427(6), which item was not included in the reference. In the opinion of the Board, fourdrinier wire cloth should be dutiable as a product rather than as parts of machinery dutiable at the rate pertaining to the particular machine on which it is to be used. Most fourdrinier wires have been entered under tariff item 427(6) at rates of 10 p.c., B.P. and 22½ p.c., M.F.N.

In recent years the Canadian market for fourdrinier wire cloth has been about \$12 million; in 1964 imports were just over \$500,000 and were practically offset by exports. The market for other wire cloth of copper and copper alloys appears to be less than \$1 million; in 1962, the last year for which separate records were kept, imports were valued at \$250,000.



NOTES ON EXISTING ITEMS

relating to wire and wire products of metals other than iron or steel

Existing Item 342

342	Phosphor tin and phosphor bronze in blocks, bars, plates, sheets and wire		
	5 p.c.	7½ p.c.	10 p.c.

The wire imported under this tariff item comes almost entirely from the United Wire Works Limited, Scotland. Almost all the phosphor bronze wire imported under the item is used in the manufacture of fourdrinier wire cloth. The wire is drawn in Canada to the sizes required. Imports under the item averaged \$778,000 annually in the years 1961-63 inclusive. Neither the suppliers nor the users proposed any change in the item.

The Board is recommending that the existing item be continued unchanged except for the addition of provisions for phosphor copper and for rods and strips. It is understood that, in fact, imports of phosphor copper have been permitted entry under this item. Under the Board's recommended definition for wire, some products now imported under tariff item 342 might not qualify as "wire"; for that reason, the addition of the word "rods" is recommended. The addition of the word "strips" is recommended to take care of any products which may not qualify for entry as "sheets" or "wire".

Existing Item 347b

347b	Tungsten rod and tungsten wire for use in Canadian manufactures		
	Free	Free	25 p.c.

This is a temporary tariff item introduced by Order in Council. Imports under it are not recorded separately but, from information received by the Board, they are probably not in excess of \$100,000 per year. They are used principally in the manufacture of automotive ignition parts and in the vacuum metallizing process. Tungsten rod is not produced in Canada. While tungsten wire in the smaller sizes is produced in Canada, the wire imported under tariff item 347b is apparently unobtainable in Canada. There seems to be no prospect of a change in this situation in the near future, and the Board is recommending that this temporary item be made statutory.

Existing Item 348f

348f Copper covered steel wire not less than 0.1875 inch in diameter and copper covered steel rod, for use in the manufacture of trolley, telegraph and telephone wires, electric wires and electric cables

Free

10 p.c.

35 p.c.

The copper covered steel rod and wire imported under this tariff item appears to come almost entirely from The Copperweld Steel Company of Pittsburgh, Pennsylvania, and most of it is imported by The Northern Electric Company for drawing down to various wire sizes in Canada. Copperweld is made by rolling a copper-clad steel ingot into rod form.

A somewhat similar product is made by The National-Standard Company of Canada Limited at Guelph, Ontario. This product, called Copperply, is made by electro-plating copper on a steel rod and the copper-plated rod is then drawn to wire sizes. The National-Standard Company proposed, in effect, that both the British Preferential and Most-Favoured-Nation Tariffs be increased by 10 percentage points. The Copperweld Steel Company propose no change in the present item.

The products covered by tariff item 348f are drawn down to finer sizes and in this respect they are similar to the copper rod covered by tariff item 348d which also carries rates of Free, B.P. and 10 p.c., M.F.N. Imports under tariff item 348f have been declining in value in recent years, possibly reflecting the decline in the use of overhead wires for street cars and electric trolley buses. They were valued at about \$900,000 in 1963, the last year for which estimates are available.

The Board is recommending no change in either the wording or the rates of existing item 348f.

Existing Item 350

350 Wire of all metals and kinds, n.o.p.

10 p.c.

20 p.c.

35 p.c.

Ex. Copper beryllium alloys, namely: ingots, sheets, plates, strips, bars, rods, tubes and wire

7½ p.c.

Imports under item 350, which have amounted to about one million dollars annually in recent years, consist of single wires, either bare or coated, made from a wide variety of metals and highly specialized alloys. The imports are known to include a wide variety of resistance wires, welding wires, solders and wires of zinc and precious metals. These products, if uncoated, would fall under Recommended Item IV(a) at 7½ p.c., B.P. and 12½ p.c., M.F.N.; if coated, they would fall under Recommended Item IV(b) at 10 p.c., B.P. and 15 p.c., M.F.N.

The wire of copper beryllium alloys covered by tariff item Ex. 350 is understood to be used primarily for the manufacture of welding electrodes and for electrical contacts and switchgear parts where heavy service is demanded. Such wire is apparently not made in Canada. Recommended Item 342b would continue the wording and rates of tariff item Ex. 350 unchanged.

Existing Item 350a

350a Electric resistance strip, ribbon, wire and wire cold rolled after drawing, containing from nineteen per cent to twenty-six per cent chromium, three per cent to seven per cent aluminum, one-half per cent to four per cent cobalt, and remainder iron

Free

Free

35 p.c.

This item describes a particular make of electric resistance wire known as Kanthal which is produced by a Swedish company. It is used where high temperatures are encountered, as in the ceramics industry. The Board heard that some resistance wires competitive with Kanthal are drawn in Canada from imported materials; such wires are dutiable under tariff item 350 at 10 p.c., B.P. and 20 p.c., M.F.N.

Ferro Enamels (Canada) Limited, Oakville, the sales agent for Kanthal, requested that tariff item 350a be continued without change, and the Board is so recommending.

Existing Item 351

351 Wire, single or several, covered with any material, including cable so covered, n.o.p.

20 p.c.

20 p.c.

30 p.c.

In recent years imports under this item have ranged from about \$4 million to about \$7 million — in 1964 they were about \$6 $\frac{3}{4}$  million. Over half of these imports, and in some years almost three-quarters of them, have come from the United States. They have consisted almost entirely of insulated wire and cable.

Under the Board's recommendations, single wire now imported under this item would fall under Recommended Item IV(b) at 10 p.c., B.P. and 15 p.c., M.F.N.; wire other than single would fall under Recommended Item IV(c) at 12 $\frac{1}{2}$  p.c., B.P. and 17 $\frac{1}{2}$  p.c., M.F.N.



Existing Item 351a

351a Wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p.

17½ p.c.

22½ p.c.

25 p.c.

In recent years imports under this item have been valued at between \$350,000 and \$550,000 a year and have come almost entirely from the United States.

Under the Board's recommendations products classified under this item would be covered by Recommended Item IV(c) at 12½ p.c., British Preferential Tariff and 17½ p.c., Most-Favoured-Nation Tariff, a reduction of 5 percentage points in each case.

Existing Item 351b

351b Wire cloth, or woven wire of brass or copper

17½ p.c.

20 p.c.

25 p.c.

The Board was informed that the wire cloth industry in Canada is divided into two distinct groups; the first group is made up of three companies weaving wire cloth over sixty inches wide known as fourdrinier wire cloth and used by the pulp and paper industry, and the second group is made up of four companies weaving wire cloth under sixty inches in width. The latter group manufactures for a wide variety of users in many sizes and makes some as fine as 200 x 200 mesh which would have 40,000 holes to the square inch.

Imports under the item have in recent years been of the order of \$200,000 per annum, mostly from the United States. Under the Board's recommendation, this item would be replaced by item V which carries rates of 12½ p.c., British preferential and 17½ p.c., most-favoured-nation -- a reduction of 5 percentage points in the British preferential rate and 2½ percentage points in the most-favoured-nation rate.

It was suggested that for statistical purposes the item be split between cloth over and under sixty inches in width; the Board understands that the statistics of imports can be classified in this fashion without separate tariff items or sub-items.

Existing Item 351c

351c Brass wire for the manufacture of fourdrinier wire or of paper-machine wire cloth

Free

15 p.c.

35 p.c.

Imports under this tariff item were reported separately until 1958 and were virtually all from the United States. Information received by the Board suggests that since 1958 imports under this item have continued to come almost exclusively from the United States and have been made almost entirely by one particular Canadian manufacturer of fourdrinier wires.

With the deletion of this item imports would fall under Recommended Item IV(a) at  $7\frac{1}{2}$  p.c., British Preferential, and  $12\frac{1}{2}$  p.c., Most-Favoured-Nation Tariff as compared with the rates under the existing item of Free, British Preferential, and 15 p.c., Most-Favoured-Nation. Since virtually all imports under item 351c have come from the United States, the effect of the Board's recommendation would be a decrease of  $2\frac{1}{2}$  percentage points in the duty.

Existing Item 353(d)

- 353 Aluminum and alloys thereof:  
 (d) Wire and cable, twisted or stranded or not, and  
 whether reinforced with steel or not

Free	22 $\frac{1}{2}$ p.c.	30 p.c.
------	-----------------------	---------

This item covers aluminum wire, single or stranded and also aluminum cable reinforced with steel, a product known as ACSR. In 1964, imports under this item, largely from the United States, were valued at about \$300,000; in relation to the size of the Canadian market these imports have not been significant.

The Board is recommending that this item be deleted; imports of single, bare aluminum wire would fall under Recommended Item IV(a) at  $7\frac{1}{2}$  p.c., B.P. and  $12\frac{1}{2}$  p.c., M.F.N. Aluminum cable, including the steel reinforced ACSR would fall under Recommended Item IV(c) at  $12\frac{1}{2}$  p.c., B.P. and  $17\frac{1}{2}$  p.c., M.F.N.

In 1964 imports from Britain, on which the duty would be increased, were valued at \$12,000.

Under the M.F.N. Tariff the principal product affected would be ACSR on which the duty would be reduced from  $22\frac{1}{2}$  p.c. to  $17\frac{1}{2}$  p.c. The rate on aluminum rod from which the aluminum wire is drawn is 3¢ per pound, or about 10 p.c. ad valorem under tariff item 353(b), and the rate on the aluminum "wire" under Recommended Item IV(a) would be  $12\frac{1}{2}$  p.c.; in these circumstances the Board considers the rate of  $17\frac{1}{2}$  p.c. on ACSR to be adequate.

Existing Item 354d

- 354d Aluminum or aluminum alloy covered aluminum alloy wire or rod, 0.375 inch or less in diameter, for use in the manufacture of wire less than 0.25 inch in diameter

Free	Free	30 p.c.
------	------	---------

This temporary tariff item covers aluminum alloy wire or rod to be drawn into finer wire sizes; it is not made in Canada. The Board believes most such wire would be used in weaving aluminum insect screening. Prior to the introduction of this temporary tariff item the most-favoured-nation duty on such wire or rod would have been  $22\frac{1}{2}$  p.c. under tariff item 353(d).

Under the Board's proposals the rod sizes covered by this temporary tariff item, if any, would fall under tariff item 353(b) which carries a most-favoured-nation rate of 3 cents per pound, about 10 p.c. ad valorem; the wire sizes would fall under Recommended Item IV(b) at 15 p.c. most-favoured-nation. Aluminum screening itself presumably falls under tariff item 354 which carries a most-favoured-nation rate of  $22\frac{1}{2}$  p.c. This rate structure would seem to provide reasonable protection for both the wire drawing and the weaving of the insect screening; accordingly the Board recommends that this temporary tariff item be revoked.

Imports under this item are estimated to have amounted to \$300,000 in 1964.







APPENDIX AIMPORT AND EXPORT STATISTICS

<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
1	Phosphor tin and phosphor bronze in blocks, bars, plates, sheets and wire	342
2	Chromium metal and tungsten metal, in lumps, powder, ingots, blocks or bars, and scrap of alloy metal containing chromium and tungsten, for alloying purposes	347b
3	Copper covered steel wire and rods, and copper in bars or rods, for the manufacture of trolley, telegraph and telephone wires, electric wires, electric cables, and electrical conductors	348f
4	Copper wire, n.o.p.	350
5	Wire, non-ferrous, n.o.p.	350, Ex. 350, 350a, 456
6	Wire, brass, n.o.p.	350, 351c
7	Alloys of copper	Ex. 350
8	Wire, single or several, covered with any material, including cable so covered, n.o.p., non-ferrous	351
9	Wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p., non-ferrous	351a
10	Wire cloth or woven wire, of brass, n.o.p.	351b
11	Copper wire cloth or woven wire of copper	351b
12	Fourdrinier wire cloth	351b
13	Brass wire, for the manufacture of fourdrinier wire or of paper-machine wire cloth	351c
14	Aluminum wire and cable, twisted, stranded or not, reinforced with steel or not	353d, 354d
15	Copper alloy wire and cable, except insulated	342, 350, Ex. 350, 351a, 351c 456



<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
16	Copper wire and cable, except insulated	348f, 350, 351a
17	Insulated wire and cable	351, 351a, 401f

EXPORTS

18	Copper wire and cable (not insulated)
19	Copper alloy wire and cable (not insulated)
20	Fourdrinier wire cloth
21	Insulated wire and cable

Table 1

Imports: Phosphor tin and phosphor bronze, in blocks, bars, plates, sheets and wire, s.c. 6126

Tariff Item 342

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>lb.</u>	<u>\$</u>	<u>\$/lb.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	1,558,753	831,814	.534	57,664	6.9
1948	1,565,500	906,051	.579	64,272	7.1
1949	681,224	418,946	.615	29,300	7.0
1950	1,461,911	845,259	.578	55,358	6.5
1951	2,117,100	1,390,439	.657	95,337	6.9
1952	1,639,457	1,072,158	.654	72,725	6.8
1953	655,409	448,536	.684	28,318	6.3
1954	932,843	643,333	.690	41,836	6.5
1955	1,053,714	795,285	.755	51,447	6.5
1956	1,818,319	1,345,837	.740	79,715	5.9
1957	1,315,077	867,974	.660	52,732	6.1
1958	1,553,083	878,524	.566	50,417	5.7
1959	1,563,422	907,226	.580	49,805	5.5
1960	1,355,228	867,724	.640	49,684	5.7
1961	1,214,628	767,380	.632	42,990	5.6
1962	1,016,740	709,549	.698	42,129	5.9
1963 <sup>(b)</sup>	1,246,493	855,569	.686	50,328	5.9

2. United Kingdom

1947	234,852	94,670	.403	2,367	2.5
1948	340,082	150,907	.444	7,406	4.9
1949	186,066	84,876	.456	4,244	5.0
1950	716,167	321,522	.449	16,076	5.0
1951	690,836	357,838	.518	17,892	5.0
1952	537,816	303,111	.564	15,156	5.0
1953	356,762	212,896	.597	10,645	5.0
1954	469,727	256,578	.546	12,829	5.0
1955	492,852	327,961	.665	16,398	5.0
1956	1,185,057	849,950	.717	42,523	5.0
1957	842,194	494,189	.587	24,710	5.0
1958	1,189,263	618,926	.520	30,947	5.0
1959	1,330,281	731,540	.550	36,577	5.0
1960	1,041,232	625,560	.601	31,282	5.0
1961	953,339	577,821	.606	28,725	5.0
1962	692,092	450,250	.651	22,575	5.0
1963	945,931	603,789	.638	30,145	5.0

Table 1  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	lb.	\$	Value \$/lb.	Collected \$	p.c. of Dutiable Value
<u>3. Germany</u> <sup>(a)</sup>					
1947	-	-	-	-	-
1948	11,710	9,179	.784	918	10.0
1949	673	535	.795	40	7.5
1950	18,659	13,905	.745	1,043	7.5
1951	-	-	-	-	-
1952	53,322	27,858	.522	2,089	7.5
1953	41,122	20,700	.503	1,552	7.5
1954	132,675	86,400	.651	6,480	7.5
1955	315,100	228,462	.725	17,134	7.5
1956	297,487	195,403	.657	14,655	7.5
1957	224,643	161,776	.720	12,133	7.5
1958	270,740	179,096	.662	13,432	7.5
1959	77,200	44,389	.575	3,329	7.5
1960	125,667	78,280	.623	5,871	7.5
1961	184,722	119,647	.648	8,973	7.5
1962	134,392	98,621	.734	7,396	7.5
1963	186,216	138,989	.746	10,425	7.5
<u>4. United States</u>					
1947	1,323,901	737,144	.557	55,297	7.5
1948	1,213,708	745,965	.615	55,948	7.5
1949	494,485	333,535	.675	25,016	7.5
1950	722,138	506,811	.702	38,012	7.5
1951	1,426,264	1,032,601	.724	77,445	7.5
1952	1,038,319	733,430	.706	54,898	7.5
1953	255,832	212,473	.831	15,936	7.5
1954	329,747	299,295	.908	22,447	7.5
1955	245,762	238,862	.972	17,915	7.5
1956	335,775	300,484	.895	22,537	7.5
1957	248,240	212,009	.854	15,889	7.5
1958	93,080	80,502	.865	6,038	7.5
1959	155,941	131,297	.842	9,899	7.5
1960	188,329	163,884	.870	12,531	7.6
1961	76,567	69,912	.913	5,292	7.6
1962	187,967	159,331	.848	12,057	7.6
1963	113,642	111,766	.983	9,681	8.7

(a) Beginning in 1952, West Germany only

(b) Imports of phosphor bronze wire included in s.c. 452-88 after 1963 (see table 15)



Table 2

Imports: Chromium metal and tungsten metal, in lumps, powder, ingots, blocks or bars, and scrap of alloy metal containing chromium and tungsten, for alloying purposes, s.c. 6124

Tariff Items 347b and 347

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>lb.</u>	<u>\$</u>	<u>\$/lb.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	32,579	70,849	2.175	-	-
1948	181,105	166,678	.920	-	-
1949	216,814	141,531	.653	-	-
1950	26,702	59,411	2.225	-	-
1951	86,562	164,827	1.904	-	-
1952	73,485	202,064	2.750	-	-
1953	106,360	234,495	2.205	-	-
1954	294,312	244,473	.831	-	-
1955	575,489	731,347	1.271	-	-
1956	152,798	484,633	3.172	-	-
1957	129,839	426,716	3.287	-	-
1958	71,251	160,259	2.249	-	-
1959	69,956	224,465	3.209	-	-
1960	122,005	174,379	1.429	-	-
1961	115,728	236,046	2.040	481	21.6
1962	151,066	274,636	1.818	100	10.6
1963 <sup>(b)</sup>	364,287	352,936	.969	21	20.2

2. United Kingdom

1947	17,920	41,176	2.298	-	-
1948	129,953	94,801	.730	-	-
1949	41,550	91,470	2.201	-	-
1950	19,000	25,694	1.352	-	-
1951	79,241	114,979	1.451	-	-
1952	48,800	81,231	1.665	-	-
1953	77,440	100,048	1.292	-	-
1954	261,766	144,646	.553	-	-
1955	471,783	357,222	.757	-	-
1956	72,761	112,780	1.550	-	-
1957	53,958	91,247	1.691	-	-
1958	22,728	6,496	.286	-	-
1959	25,654	28,938	1.128	-	-
1960	55,341	61,685	1.115	-	-
1961	61,764	66,167	1.071	12	15.4
1962	77,779	71,368	.918	-	-
1963	58,086	58,275	1.003	-	-

Table 2  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	lb.	\$	Value \$/lb.	Collected \$	p.c. of Dutiable Value
<u>3. Germany</u> <sup>(a)</sup>					
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	-	-	-	-
1951	-	-	-	-	-
1952	-	-	-	-	-
1953	330	1,326	4.018	-	-
1954	6,150	14,547	2.365	-	-
1955	-	-	-	-	-
1956	200	676	3.380	-	-
1957	1,100	1,844	1.844	-	-
1958	-	-	-	-	-
1959	-	-	-	-	-
1960	5,470	9,690	1.771	-	-
1961	8,960	16,664	1.860	-	-
1962	20,920	34,808	1.664	-	-
1963	11,143	17,691	1.588	-	-
<u>4. United States</u>					
1947	14,659	29,673	2.024	-	-
1948	51,152	71,877	1.405	-	-
1949	175,264	50,061	.286	-	-
1950	7,702	33,717	4.378	-	-
1951	7,321	49,848	6.809	-	-
1952	24,144	109,643	4.541	-	-
1953	28,590	133,121	4.656	-	-
1954	26,330	82,633	3.138	-	-
1955	103,698	373,858	3.605	-	-
1956	79,744	368,864	4.626	-	-
1957	74,787	331,081	4.427	-	-
1958	48,151	149,225	3.099	-	-
1959	44,045	190,276	4.320	-	-
1960	61,091	102,007	1.670	-	-
1961	39,264	146,067	3.720	469	21.8
1962	38,510	157,029	4.078	100	10.6
1963	75,256	186,172	2.474	21	20.2

(a) Beginning in 1952, West Germany only

(b) Not available separately after 1963

Table 3

Imports: Copper covered steel wire and rods, and copper in bars or rods, for the manufacture of trolley, telegraph and telephone wires, electric wires, electric cables, and electrical conductors, s.c. 6044

Tariff Items 348f and 348d

<u>Year</u>	<u>Total Imports</u>		<u>Value</u>	<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>Collected</u>	<u>p.c. of</u>
				<u>\$</u>	<u>Dutiable</u>
					<u>Value</u>
<u>1. Total</u>					
1947	34,709	646,743	18.63	63,513	10.0
1948	39,316	778,340	19.80	77,652	10.0
1949	28,569	581,110	20.34	55,047	9.5
1950	32,529	730,208	22.45	62,556	10.0
1951	28,417	676,121	23.79	67,612	10.0
1952	18,313	418,073	22.83	41,807	10.0
1953	24,984	647,824	25.93	64,782	10.0
1954	23,510	623,953	26.54	62,395	10.0
1955	23,165	721,913	31.16	72,191	10.0
1956	43,246	1,662,736	38.45	134,459	10.0
1957	31,413	1,073,165	34.16	107,317	10.0
1958	53,037	1,507,262	28.42	100,970	10.0
1959	35,354	1,237,086	34.99	102,789	10.0
1960	27,411	985,160	35.94	97,887	10.0
1961	23,633	883,528	37.39	88,352	10.0
1962	17,125	688,015	40.18	68,793	10.0
1963(a)	21,236	890,804	41.95	89,080	10.0
<u>2. United Kingdom</u>					
1947-49	-	-	-	-	-
1950	23	764	33.22	-	-
1951-55	-	-	-	-	-
1956	6,719	318,149	47.35	-	-
1957	-	-	-	-	-
1958	14,330	309,969	21.63	-	-
1959	7,021	209,196	29.80	-	-
1960	152	6,337	41.69	-	-
1961-63	-	-	-	-	-



Table 3  
(Cont'd)

Year	Total Imports		Value \$/cwt.	Collected \$	Duty as p.c. of Dutiable Value
	cwt.	\$			
3. United States					
1947	34,709	646,743	18.63	63,513	10.0
1948	39,316	778,340	19.80	77,652	10.0
1949	28,569	581,110	20.34	55,047	9.5
1950	32,506	729,444	22.44	62,556	10.0
1951	28,417	676,121	23.79	67,612	10.0
1952	18,313	418,073	22.83	41,807	10.0
1953	24,984	647,824	25.93	64,782	10.0
1954	23,510	623,953	26.54	62,395	10.0
1955	23,165	721,913	31.16	72,191	10.0
1956	36,527	1,344,587	36.81	134,459	10.0
1957	31,413	1,073,165	34.16	107,317	10.0
1958	29,747	1,009,702	33.94	100,970	10.0
1959	28,333	1,027,890	36.28	102,789	10.0
1960	27,259	978,823	35.91	97,887	10.0
1961	23,633	883,528	37.39	88,352	10.0
1962	17,125	688,015	40.18	68,793	10.0
1963	21,236	890,804	41.95	89,080	10.0

(a) Imports under tariff item 348f included in s.c. 452-18 after 1963  
(see table 16)

Table 4

Imports: Copper wire, n.o.p., s.c. 6050Tariff Item 350

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>lb.</u>	<u>\$</u>	<u>\$/lb.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	548,224	245,574	.448	68,393	27.9
1948	488,893	218,604	.447	43,832	20.1
1949	91,735	48,309	.527	9,499	19.7
1950	225,751	82,825	.367	12,208	14.7
1951	262,164	148,858	.568	26,866	18.1
1952	207,482	92,120	.444	16,935	19.5
1953	583,008	190,467	.327	37,410	19.6
1954	174,637	91,092	.522	16,453	18.7
1955	121,645	71,914	.591	14,229	19.8
1956	193,483	186,350	.963	36,671	19.7
1957	93,073	51,387	.552	7,458	14.5
1958	210,440	109,557	.521	16,571	15.9
1959	50,239	31,410	.625	5,256	16.7
1960	43,053	39,440	.916	7,847	20.0
1961	39,189	42,556	1.086	8,420	19.8
1962	40,281	41,711	1.036	8,661	21.0
1963(a)	44,440	42,651	.960	8,458	20.5
<u>2. United Kingdom</u>					
1947	55,580	20,472	.368	1,024	5.0
1948	1,001	778	.777	78	10.0
1949	1,288	1,206	.936	121	10.0
1950	106,821	43,583	.408	4,358	10.0
1951	55,278	28,174	.510	2,817	10.0
1952	4,583	4,289	.936	429	10.0
1953	14,472	7,133	.493	743	10.4
1954	32,014	11,743	.367	1,192	10.2
1955	11,801	2,039	.173	249	12.2
1956	11,035	5,987	.543	599	10.0
1957	61,775	28,192	.456	2,819	10.0
1958	94,408	42,192	.447	4,219	10.0
1959	18,420	10,256	.557	1,026	10.0
1960	1,850	1,495	.808	288	19.3
1961	4,045	4,907	1.213	878	17.9
1962	10,509	6,118	.582	758	12.4
1963	10,908	6,514	.597	1,099	18.0

Table 4  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	lb.	\$	Value \$/lb.	Collected \$	p.c. of Dutiable Value
3. United States					
1947	490,574	222,575	.454	66,611	30.0
1948	487,892	217,826	.446	43,754	20.1
1949	90,447	47,103	.521	9,378	20.0
1950	118,930	39,242	.330	7,850	20.0
1951	206,886	120,684	.583	24,049	20.0
1952	202,899	87,831	.433	16,506	20.0
1953	563,100	181,117	.322	36,224	20.0
1954	142,623	79,349	.556	15,261	20.0
1955	109,844	69,875	.636	13,980	20.0
1956	182,341	180,096	.988	36,019	20.0
1957	30,833	22,749	.738	4,550	20.0
1958	115,570	67,047	.580	12,288	20.0
1959	31,651	21,088	.666	4,218	20.0
1960	41,098	37,802	.920	7,530	20.0
1961	34,688	36,677	1.057	7,337	20.0
1962	29,419	35,265	1.199	7,829	22.5
1963	33,293	35,865	1.077	7,305	21.2

(a) Included in s.c. 452-18 (see table 16)



Table 5

Imports: Wire, non-ferrous, n.o.p., s.c. 6250

Tariff Items 350, Ex. 350, 350a, 456, Ex. 349a and Ex. 711

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	308,718	92,229	29.9
1948	189,171	37,753	20.0
1949	205,352	40,951	19.9
1950	268,927	50,983	19.1
1951	430,412	81,405	19.4
1952	255,259	47,957	18.9
1953	350,081	63,377	18.4
1954	339,348	61,965	18.8
1955	459,093	85,697	19.2
1956	802,833	148,217	19.1
1957	507,209	83,821	17.9
1958(a)	613,529	103,104	18.1
1959	694,638	120,470	18.1
1960	596,896	98,234	17.5
1961	777,610	129,322	18.0
1962	947,724	174,143	20.0
1963(b)	971,346	162,179	19.2
<u>2. United Kingdom</u>			
1947	1,412	71	5.0
1948	2,059	199	9.7
1949	1,193	119	10.0
1950	23,588	2,326	10.0
1951	25,642	2,439	10.0
1952	27,926	2,793	10.0
1953	53,964	5,421	10.0
1954	43,686	3,920	10.0
1955	37,114	3,631	10.0
1956	70,491	6,620	10.0
1957	96,883	9,688	10.0
1958	105,454	10,080	10.0
1959	115,861	11,737	10.2
1960	122,266	11,927	10.0
1961	178,170	20,102	12.0
1962	191,118	26,637	14.3
1963	201,518	24,474	13.3

Table 5  
(Cont'd)  
Duty as  
p.c. of  
Dutiable  
Value

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	
<u>3. Sweden</u>			
1947-50	-	-	-
1951	5,573	-	-
1952	187	-	-
1953	3,194	-	-
1954	3,056	-	-
1955	4,204	-	-
1956	17,019	-	-
1957	28,806	-	-
1958	29,365	-	-
1959	19,117	874	20.0
1960	24,927	2,088	20.0
1961	87,668	12,411	20.0
1962	85,439	16,766	21.1
1963	93,231	13,606	19.6
<u>4. United States</u>			
1947	307,285	92,152	30.0
1948	186,538	37,439	20.1
1949	203,944	40,789	20.0
1950	242,240	48,037	20.0
1951	384,506	76,028	20.0
1952	223,325	44,400	20.0
1953	287,406	56,852	20.0
1954	286,663	56,856	20.0
1955	407,564	80,023	20.0
1956	696,834	137,898	20.0
1957	377,914	73,409	19.9
1958	469,394	91,161	19.8
1959	534,002	102,749	19.8
1960	406,806	77,111	19.8
1961	490,036	92,573	19.8
1962	649,227	126,861	21.6
1963	650,363	119,477	21.1

(a) Includes former s.c. 6245 after 1957

(b) Not available separately after 1963

Table 6

Imports: Wire, brass, n.o.p., s.c. 6033Tariff Items 350 and 351c

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>lb.</u>	<u>\$</u>	<u>\$/lb.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	257,237	96,312	.374	28,840	29.9
1948	111,907	49,561	.443	10,179	20.7
1949	135,798	74,399	.548	14,861	20.0
1950	87,838	53,198	.606	10,440	19.8
1951	94,025	59,638	.634	11,360	19.6
1952	26,279	21,075	.802	3,476	17.0
1953	36,202	26,403	.729	4,521	17.1
1954	44,573	28,343	.636	4,516	16.0
1955	90,736	47,132	.519	5,833	12.4
1956	145,737	94,416	.648	13,851	14.8
1957	188,897	93,781	.496	12,294	13.1
1958	345,130	130,522	.378	16,760	12.9
1959(a)	320,825	145,056	.452	14,673	13.1
1960	464,847	238,689	.513	30,805	13.7
1961	212,152	119,776	.565	17,574	14.7
1962	283,073	160,983	.569	24,548	15.5
1963(b)	309,563	182,456	.589	27,855	15.5
<u>2. United Kingdom</u>					
1947	727	213	.293	11	5.2
1948	-	-	-	-	-
1949	451	191	.424	19	10.0
1950	2,010	1,274	.634	127	10.0
1951	3,724	2,557	.687	256	10.0
1952	7,745	6,057	.782	606	10.0
1953	11,582	7,597	.656	760	10.0
1954	25,015	11,279	.451	1,128	10.0
1955	78,502	35,694	.455	3,569	10.0
1956	96,523	48,797	.506	4,881	10.0
1957	147,165	64,326	.437	6,433	10.0
1958	294,258	93,082	.316	9,308	10.0
1959	237,563	92,960	.391	6,226	10.0
1960	217,784	93,536	.429	8,133	10.0
1961	80,540	42,990	.534	4,297	10.0
1962	127,964	65,716	.514	8,047	12.2
1963	72,786	45,958	.631	5,266	12.0



Table 6  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Duty</u>	Duty as p.c. of Dutiable <u>Value</u>
	<u>lb.</u>	<u>\$</u>	<u>Value</u> \$/lb.	<u>Collected</u> \$	
<u>3. United States</u>					
1947	256,510	96,099	.375	28,829	30.0
1948	111,907	49,561	.443	10,179	20.7
1949	134,147	73,406	.547	14,682	20.0
1950	85,628	51,835	.605	10,295	20.0
1951	89,638	56,705	.633	11,029	20.0
1952	18,534	15,018	.810	2,870	20.0
1953	24,620	18,806	.764	3,761	20.0
1954	18,685	15,853	.848	3,146	20.0
1955	12,234	11,438	.935	2,264	20.0
1956	48,895	45,403	.929	8,927	20.0
1957	40,691	28,744	.706	5,719	20.0
1958	47,774	35,743	.748	7,112	20.0
1959	79,262	50,163	.633	8,254	17.2
1960	226,024	131,011	.580	20,626	15.9
1961	125,612	73,873	.588	12,694	17.2
1962	150,609	93,025	.618	16,277	18.0
1963	220,777	128,986	.584	21,841	16.9

(a) Includes former s.c. 6036 after 1958 (see table 13)

(b) Included in s.c. 452-88 after 1963 (see table 15)

Table 7

Imports: Alloys of copper, s.c. 6119Tariff Items Ex. 350, 342a, 349a, Ex. 349a and Ex. 711

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	272,899	37,571	13.9
1948	310,011	42,863	14.0
1949	182,511	27,116	15.0
1950	265,608	38,164	14.6
1951	267,016	38,870	14.6
1952	295,995	35,060	14.4
1953	277,139	35,497	13.8
1954	230,501	31,219	14.4
1955	337,591	46,177	14.6
1956(a)	501,893	66,532	14.1
1957	364,938	45,916	12.7
1958	403,335	50,870	12.7
1959	482,014	57,585	12.4
1960	422,601	49,936	12.1
1961	452,172	52,519	11.8
1962	692,584	81,025	12.0
1963(b)	847,789	112,662	13.5
<u>2. United States</u>			
1947	268,300	37,399	14.1
1948	307,434	42,670	14.1
1949	181,558	27,065	15.0
1950	250,340	37,051	15.0
1951	249,866	37,304	15.0
1952	260,254	33,309	15.0
1953	228,706	31,346	15.0
1954	210,769	29,957	15.0
1955	305,711	42,858	15.0
1956	428,418	59,455	14.3
1957	321,525	42,342	13.3
1958	311,120	40,945	13.3
1959	416,987	50,976	12.5
1960	368,914	44,894	12.2
1961	396,521	47,034	11.9
1962	578,347	71,487	12.6
1963	734,985	102,789	14.1

(a) Prior to 1956, s.c. 6129

(b) Imports under tariff item Ex. 350 included in s.c. 452-88 after 1963 (see table 15)

Table 8

Imports: Wire, single or several, covered with any material,  
including cable so covered, n.o.p., non-ferrous,  
s.c. 6247

Tariff Items 351 and 438s

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	2,806,002	765,516	27.3
1948	2,756,116	550,440	20.0
1949	1,760,484	350,144	19.9
1950	1,453,031	287,675	19.8
1951	3,285,494	657,100	20.0
1952	2,812,400	547,289	20.0
1953	2,678,940	535,321	20.0
1954	2,916,435	581,887	20.0
1955	4,535,653	905,540	20.0
1956	8,968,891	1,780,792	20.0
1957	6,870,268	1,369,710	20.0
1958	6,862,247	1,352,522	19.9
1959	7,056,185	1,396,395	19.8
1960	6,953,318	1,362,255	19.6
1961	6,475,319	939,113	19.6
1962	4,254,463	938,974	22.5
1963 <sup>(b)</sup>	4,949,878	1,003,820	20.7
<u>2. United Kingdom</u>			
1947	59,604	5,960	10.0
1948	59,283	10,490	17.7
1949	104,037	18,726	18.0
1950	432,047	83,518	19.4
1951	1,098,947	219,792	20.0
1952	811,131	161,713	19.9
1953	796,279	159,256	20.0
1954	707,689	141,535	20.0
1955	1,250,599	250,120	20.0
1956	3,113,755	622,750	20.0
1957	2,784,980	556,996	20.0
1958	2,998,293	598,566	20.0
1959	3,035,617	602,310	19.8
1960	2,145,395	417,724	19.5
1961	2,353,952	124,469	18.1
1962	709,554	160,895	22.7
1963	1,073,578	212,865	19.9



Table 8  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>3. Germany</u> <sup>(a)</sup>			
1947	-	-	-
1948	-	-	-
1949	-	-	-
1950	-	-	-
1951	1,910	382	20.0
1952	39,222	7,845	20.0
1953	14,496	2,899	20.0
1954	45,582	9,116	20.0
1955	3,689	738	20.0
1956	434,201	86,840	20.0
1957	75,525	15,105	20.0
1958	50,039	10,008	20.0
1959	86,156	17,221	20.0
1960	310,789	62,410	20.1
1961	47,231	9,420	19.9
1962	107,295	26,464	24.7
1963	102,497	20,513	20.0
<u>4. United States</u>			
1947	2,743,008	758,624	27.7
1948	2,696,669	539,917	20.1
1949	1,656,436	331,416	20.0
1950	1,020,962	204,153	20.0
1951	2,182,515	436,502	20.0
1952	1,962,047	377,731	20.0
1953	1,868,004	373,134	20.0
1954	2,161,852	430,974	20.0
1955	3,278,269	654,063	20.0
1956	5,420,202	1,071,055	20.0
1957	3,999,657	795,588	20.0
1958	3,803,827	741,930	19.8
1959	3,887,293	767,430	19.8
1960	4,480,780	878,850	19.7
1961	4,002,906	790,976	19.9
1962	3,370,265	739,263	22.3
1963	3,544,086	731,232	20.9

(a) Beginning in 1952, West Germany only

(b) Imports under tariff item 351 included in s.c. 469-75 after 1963  
(see table 17)

Table 9

Imports: Wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p., non-ferrous, s.c. 6249

Tariff Item 351a

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	62,497	13,776	22.0
1948	36,145	8,032	22.4
1949	63,803	14,251	22.3
1950	98,496	19,873	20.2
1951	207,997	42,940	20.7
1952	308,952	64,822	21.0
1953	404,553	84,525	21.0
1954	248,776	52,226	21.2
1955	249,543	51,609	21.0
1956	657,750	143,234	21.9
1957	272,697	56,751	21.1
1958	271,614	58,044	21.8
1959	364,760	80,038	21.9
1960	442,722	98,569	22.3
1961	381,922	84,574	22.4
1962	361,051	76,557	22.1
1963 <sup>(b)</sup>	547,872	103,850	22.1

2. United Kingdom

1947	2,107	184	8.7
1948	1,676	106	15.7
1949	1,548	244	15.8
1950	33,890	5,338	15.8
1951	55,381	8,723	15.8
1952	69,523	10,950	15.8
1953	91,830	14,463	15.7
1954	47,347	7,457	15.7
1955	53,653	8,450	15.7
1956	63,749	10,167	15.9
1957	54,706	8,615	15.7
1958	28,534	4,494	15.7
1959	28,785	4,538	15.8
1960	13,609	2,145	15.8
1961	5,527	874	15.8
1962	32,410	5,120	15.8
1963	32,042	5,079	15.9

Table 9  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>3. Germany</u> <sup>(a)</sup>			
1947	-	-	-
1948	-	-	-
1949	-	-	-
1950	-	-	-
1951	-	-	-
1952	1,324	298	22.5
1953	17,791	4,003	22.5
1954	41,153	9,260	22.5
1955	1,763	397	22.5
1956	18,782	4,226	22.5
1957	6,714	1,511	22.5
1958	3,190	718	22.5
1959	2,064	464	22.5
1960	3,444	776	22.5
1961	3,303	745	22.6
1962	2,609	594	22.8
1963	583	131	22.5
<u>4. United States</u>			
1947	60,390	13,592	22.5
1948	35,469	7,926	22.5
1949	62,255	14,007	22.5
1950	64,606	14,535	22.5
1951	152,616	34,217	22.5
1952	238,105	53,574	22.5
1953	294,932	66,059	22.5
1954	157,940	34,983	22.5
1955	185,456	40,811	22.5
1956	570,948	127,879	22.5
1957	208,662	46,037	22.5
1958	238,630	52,548	22.5
1959	330,348	74,314	22.5
1960	424,846	95,463	22.5
1961	372,056	82,722	22.5
1962	325,908	70,815	22.7
1963	501,859	95,628	22.5

(a) Beginning in 1952, West Germany only

(b) Included in s.c. 452-18, 452-88 and 469-75 (see tables 16, 15 and 17)



Table 10

Imports: Wire cloth or woven wire, of brass, n.o.p., s.c. 6034

Tariff Item 351b

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1947	21,638	4,585	21.3
1948	161,345	32,208	20.0
1949	139,737	27,929	20.0
1950	24,486	4,786	19.7
1951	55,484	10,849	19.6
1952	124,325	24,176	19.6
1953	83,648	15,533	18.6
1954	69,882	13,449	19.2
1955	98,139	19,350	19.7
1956	159,260	31,349	19.7
1957	128,067	25,084	19.6
1958	53,476	10,491	19.7
1959	74,650	14,462	19.7
1960	161,654	31,939	19.8
1961	137,828	27,371	19.9
1962 <sup>(b)</sup>	206,491	47,104	23.0
<u>2. United Kingdom</u>			
1947	1,843	161	8.7
1948	856	135	15.8
1949	444	70	15.8
1950	2,119	313	15.8
1951	5,842	920	15.7
1952	12,280	1,896	15.8
1953	28,163	4,436	15.8
1954	12,415	1,955	15.7
1955	6,543	1,031	15.8
1956	11,838	1,865	15.8
1957	11,942	1,882	15.8
1958	3,667	578	15.8
1959	5,420	854	15.8
1960	6,356	989	15.8
1961	4,687	736	15.7
1962	7,804	1,465	18.8

Table 10  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	Duty as p.c. of Dutiable <u>Value</u>
<u>3. Germany</u> <sup>(a)</sup>			
1947	-	-	-
1948	-	-	-
1949	-	-	-
1950	-	-	-
1951	3,706	741	20.0
1952	74,563	14,913	20.0
1953	1,304	261	20.0
1954	5,117	1,024	20.0
1955	32,362	6,472	20.0
1956	107,344	21,469	20.0
1957	55,347	11,069	20.0
1958	4,224	845	20.0
1959	6,953	1,391	20.0
1960	3,888	779	20.0
1961	5,344	1,070	20.0
1962	10,296	3,814	37.0
<u>4. United States</u>			
1947	19,795	4,424	22.5
1948	160,489	32,073	20.0
1949	138,648	27,730	20.0
1950	20,429	4,086	20.0
1951	38,249	7,650	20.0
1952	21,477	4,166	20.0
1953	46,644	9,329	20.0
1954	46,670	9,334	20.0
1955	43,981	8,796	20.0
1956	36,817	7,363	20.0
1957	55,238	11,025	20.0
1958	35,870	7,125	20.0
1959	50,513	9,865	20.0
1960	140,779	28,046	20.0
1961	116,326	23,268	20.0
1962	138,236	30,692	22.5

(a) Beginning in 1952, West Germany only

(b) Not available separately after 1962

Table 11

Imports: Copper wire cloth or woven wire of copper, s.c. 6051

Tariff Item 351b

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	Duty as p.c. of Dutiable Value
<u>1. Total</u>			
1947	3,343	757	22.6
1948	6,286	1,263	20.1
1949	6,772	1,506	22.2
1950	8,163	1,499	18.4
1951	24,150	4,718	19.5
1952	14,006	2,647	18.9
1953	14,808	2,784	18.8
1954	13,960	2,756	19.7
1955	61,320	12,125	19.8
1956	23,907	4,745	19.8
1957	5,812	1,150	19.8
1958	6,184	1,033	17.5
1959	9,317	1,769	19.0
1960	3,652	657	18.0
1961	19,977	3,975	19.9
1962 <sup>(a)</sup>	45,892	10,666	23.2
<u>2. United States</u>			
1947	3,343	757	22.6
1948	6,286	1,263	20.1
1949	3,065	613	20.0
1950	5,020	1,004	20.0
1951	21,532	4,306	20.0
1952	5,941	1,188	20.0
1953	10,202	2,040	20.0
1954	12,695	2,539	20.0
1955	53,127	10,625	20.0
1956	18,808	3,763	20.0
1957	5,004	1,001	20.0
1958	2,390	419	20.0
1959	5,494	1,167	21.2
1960	1,920	383	19.9
1961	16,717	3,462	20.7
1962	43,679	10,247	23.5

<sup>(a)</sup> Not available separately after 1962



Table 12

Imports: Fourdrinier wire cloth, s.c. 5956

Tariff Items 351b, 427(1) and 427a

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1963 <sup>(a)</sup>	1,221	205,864	168.60	39,836	19.4
1964 <sup>(b)</sup>	3,181	566,402	178.06	105,326	19.0
<u>2. United Kingdom</u>					
1963	93	31,753	341.43	3,034	9.6
1964	374	126,854	339.18	12,027	9.5
<u>3. Germany</u>					
1963	602	57,949	96.26	12,963	22.4
1964	1,151	99,482	86.43	22,239	22.4
<u>4. United States</u>					
1963	142	39,821	280.43	8,363	21.0
1964	589	198,617	337.21	41,925	22.4

(a) Not available separately prior to 1963

(b) s.c. 463-44 after 1963; includes imports under tariff item 427(6)

Table 13

Imports: Brass wire, for the manufacture of fourdrinier wires  
or of paper-machine wire cloth, s.c. 6036

Tariff Item 351c

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	Duty as p.c. of Dutiable <u>Value</u>
<u>1. Total</u>			
1947	73,870	11,351	15.4
1948	85,180	12,790	15.0
1949	35,555	5,333	15.0
1950	22,594	3,389	15.0
1951	26,018	3,903	15.0
1952	41,350	6,203	15.0
1953	30,280	4,542	15.0
1954	47,168	7,075	15.0
1955	15,982	2,397	15.0
1956	1,327	9	14.3
1957(a)	-	-	-
1958	-	-	-
<u>2. United States</u>			
1947	73,870	11,351	15.4
1948	85,180	12,790	15.0
1949	35,555	5,333	15.0
1950	22,594	3,389	15.0
1951	26,018	3,903	15.0
1952	41,350	6,203	15.0
1953	27,135	4,070	15.0
1954	44,819	6,723	15.0
1955	15,982	2,397	15.0
1956	63	9	14.3
1957	-	-	-
1958	-	-	-

(a) Included in s.c. 6033 after 1958 (see Table 6)

Table 14

Imports: Aluminum wire and cable, twisted, stranded or not,  
reinforced with steel or not, s.c. 6013

Tariff Items 353d and 354d

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u> <u>Value</u>	<u>Duty</u> <u>Collected</u>	<u>Duty as</u> <u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
	<u>cwt.</u>	<u>\$</u>	<u>\$/cwt.</u>	<u>\$</u>	
<u>1. Total</u>					
1947	10	411	41.10	123	29.9
1948	56	3,267	58.34	735	22.5
1949	155	9,208	59.41	2,072	22.5
1950	78	5,522	70.79	1,217	22.5
1951	275	12,712	46.23	2,859	22.5
1952	500	20,055	40.11	3,972	22.5
1953	1,403	76,617	54.61	16,989	22.5
1954	30,824	824,680	26.75	23,232	22.5
1955	1,830	99,723	54.49	18,775	22.5
1956	18,787	676,785	36.02	29,499	11.1
1957	44,012	1,630,462	37.05	22,955	11.4
1958	27,009	978,725	36.24	16,555	22.5
1959	7,468	330,418	44.24	11,361	22.4
1960	3,549	165,668	46.68	9,331	22.5
1961	3,796	183,438	48.32	12,506	20.8
1962	6,197	301,174	48.60	14,478	12.1
1963	9,828	473,724	48.20	40,696	20.0
1964 <sup>(a)</sup>	7,046	298,869	42.42	49,757	22.3

2. United Kingdom

1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	3	112	37.33	-	-
1951	-	-	-	-	-
1952	56	2,404	42.93	-	-
1953	32	1,111	34.72	-	-
1954	28,814	721,373	25.04	-	-
1955	264	16,279	61.66	-	-
1956	13,259	399,973	30.17	-	-
1957	40,106	1,428,577	35.62	-	-
1958	24,233	852,923	35.20	-	-
1959	855	29,412	34.40	-	-
1960	76	4,008	52.74	-	-
1961	122	6,442	52.80	-	-
1962	75	4,779	63.72	81	4.9
1963	126	7,622	60.49	108	4.9
1964	153	11,698	76.46	-	-



Table 14  
(Cont'd)

Year	Total Imports		Unit	Duty	Duty as
	cwt.	\$	Value \$/cwt.	Collected \$	p.c. of Dutiable Value
<u>3. United States</u>					
1947	10	411	41.10	123	29.9
1948	56	3,267	58.34	735	22.5
1949	155	9,208	59.41	2,072	22.5
1950	75	5,410	72.13	1,217	22.5
1951	275	12,712	46.23	2,859	22.5
1952	444	17,651	39.75	3,972	22.5
1953	1,351	74,758	55.34	16,821	22.5
1954	2,008	103,187	51.39	23,205	22.5
1955	1,566	83,444	53.28	18,775	22.5
1956	5,528	276,812	50.07	29,499	11.1
1957	3,906	201,885	51.69	22,955	11.4
1958	2,776	125,802	45.32	16,555	22.5
1959	6,613	301,006	45.52	11,361	22.4
1960	3,473	161,660	46.55	9,331	22.5
1961	3,454	165,396	47.89	10,937	22.5
1962	5,882	281,956	47.94	13,272	12.8
1963	9,277	440,828	47.52	39,276	22.3
1964	3,894	207,833	53.37	34,400	22.2

(a) s.c. 451-47; includes tariff item 353(d) and wire imports under tariff item 354; imports under tariff item 354d are not included

Table 15

Imports: Copper alloy wire and cable, except insulated,  
s.c. 452-88

---

Tariff Items 342, 350, Ex. 350, 351a, 351c, 456, 349a and Ex. 711

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1964 <sup>(a)</sup>	17,748	1,266,292	71.35	107,502	8.7
<u>2. United Kingdom</u>					
1964	10,749	718,771	66.87	39,723	5.5
<u>3. Germany</u>					
1964	2,654	189,819	71.52	15,744	8.3
<u>4. United States</u>					
1964	3,992	347,500	87.05	50,602	15.7

(a) Not available separately prior to 1964

Table 16

Imports: Copper wire and cable, except insulated, s.c. 452-18

Tariff Items 348f, 350 and 351a

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	cwt.	\$	\$/cwt.	\$	
<u>1. Total</u>					
1964 <sup>(a)</sup>	5,190	312,125	60.14	53,341	17.9
<u>2. United Kingdom</u>					
1964	563	37,015	65.75	3,053	10.9
<u>3. United States</u>					
1964	4,411	261,471	59.28	47,435	18.5

(a) Not available separately prior to 1964



Table 17

Imports: Insulated wire and cable, s.c. 469-75

Tariff Items 351, 351a, 401f and 445d

<u>Year</u>	<u>Total Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>			
1964 <sup>(a)</sup>	6,743,003	1,326,913	20.1
<u>2. United Kingdom</u>			
1964	1,663,874	328,636	19.8
<u>3. Germany</u>			
1964	246,570	49,454	20.1
<u>4. Japan</u>			
1964	262,161	53,775	20.5
<u>5. United States</u>			
1964	4,508,039	883,066	20.2

(a) Not available separately prior to 1964

Table 18

Exports: Copper wire and cable (not insulated) s.c. 452-18

<u>Year</u>	<u>Quantity</u> cwt.	<u>Value</u> \$	<u>Unit Value</u> \$/cwt.
		<u>Total</u>	
1950	..	1,350,165	..
1951	..	1,462,336	..
1952	..	5,619,034	..
1953	..	1,952,616	..
1954	..	878,515	..
1955	..	1,804,486	..
1956	..	1,942,830	..
1957	..	539,251	..
1958	..	149,784	..
1959	..	391,466	..
1960	..	278,302	..
1961(a)	8,156	303,027	37.15
1962	9,140	324,548	35.51
1963	7,526	330,619	43.93
1964	16,955	726,760	42.86

(a) Prior to 1961, s.c. 6190, which was entitled "Copper wire, bare"

Table 19

Exports: Copper alloy wire and cable (not insulated) s.c. 452-88

<u>Year</u>	<u>Quantity</u> cwt.	<u>Value</u> \$	<u>Unit Value</u> \$/cwt.
		<u>Total</u>	
1953	453	26,699	58.94
1954	7,863	95,079	12.09
1955	2,724	122,340	44.91
1956	329	24,150	73.40
1957	299	26,349	88.12
1958	889	70,447	79.24
1959	3,408	248,426	72.89
1960	8,272	510,312	61.69
1961(a)	4,979	313,695	63.00
1962	4,049	252,486	62.36
1963	6,396	436,749	68.28
1964	8,222	608,187	73.97

(a) Prior to 1961, s.c. 6105, which was entitled "Brass wire and bronze wire"

Table 20

Exports: Fourdrinier wire cloth, s.c. 463-44

<u>Year</u>	<u>Total Exports</u> \$
1961 <sup>(a)</sup>	361,696
1962	536,972
1963	519,025
1964	470,350

(a) Not available separately prior to 1961

Table 21

Exports: Insulated wire and cable, s.c. 469-75<sup>(a)</sup>

<u>Year</u>	<u>Quantity</u> cwt.	<u>Value</u> \$	<u>Unit Value</u> \$/cwt.
<u>Total</u>			
1950	..	2,669,022	..
1951	..	3,048,794	..
1952	..	8,744,749	..
1953	..	4,156,306	..
1954	..	5,132,546	..
1955	..	6,607,791	..
1956	..	6,563,626	..
1957	..	4,131,993	..
1958	..	2,075,450	..
1959	..	2,464,038	..
1960	..	4,588,457	..
1961 <sup>(a)</sup>	139,883	5,261,798	37.62
1962	108,702	5,535,879	50.93
1963	137,383	6,762,006	49.22
1964	227,244	14,322,218	63.03

(a) Prior to 1961, s.c. 6180, which was entitled "Copper wire and cable, insulated"





APPENDIX BGENERAL STATISTICAL DATA

Table 1 - Canadian Factory Shipments of  
Electrical Wires and Cables

Table 2 - Prices of Selected Base Metals,  
by Countries

Table 1

## CANADIAN FACTORY SHIPMENTS OF ELECTRICAL WIRES AND CABLES (ALL INDUSTRIES)

1955 - 1962

	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u> - thousand dollars -	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
Telephone Cables: Exchange Toll and Toll Entrance	21,507 1,737	24,374 1,520	21,747 534	20,007 3,195	26,096 3,399)	31,788	28,278	31,318
Telephone Wires, Insulated (Drop Wires, Inside Wires, Other Telephone Wires)	5,068	6,191	6,690	6,102	7,703	7,843	8,583	7,509
Telephone Switchboard Wires and Cables	4,754	5,830	7,235	6,075	6,332	6,126	6,560	6,736
Television and Radio Wires and Cables	1,356	1,732	1,616	1,334	1,296	1,170	1,864	2,577
Telephone Cordage	872	1,060	862	790	1,095	1,259	828	746
Bare Wires and Cables (Other than Copperweld and Aluminum)	13,016	15,033	8,584	6,776	8,489	7,880	7,302	7,401
Bare Copperweld Wires and Cables and Copperweld-Copper Strands	1,231 13,418	1,874 16,288	1,163 17,733	858 17,985	1,004 13,375	738 15,014	787 14,043	538 16,265
Bare ACSR and Aluminum Wires and Cables	)	)	)	( 309	366	269	278	170
Annunciator and Office Wires and Cables	)	)	)	( 8,400	10,342	10,428	11,758	14,551
Magnet Wires: Thin Film Insulated	16,431	21,933	14,035	( 3,196	3,514	2,791	2,913	3,187
Other than Thin Film Insulated	)	)	)	( 5,595	5,709	4,752	4,621	4,565
Weatherproof Wires	13,081	13,961	8,122	9,738	10,099	13,734	12,579	14,659
Power Cables (Copper or Aluminum Conductors)	10,934	16,880	15,586	2,388	3,019	2,530	2,582	3,092
Signal and Control Cables	1,886	3,523	2,878	2,413	2,422	1,090	1,444	5,083
Portable and Power Supply Cables	1,871	4,493	4,817	9,475	10,296	7,749	9,799	10,270
Building Wires: Non-Metallic Sheathed Cables	9,113	10,062	8,692	5,750	5,553	5,016	6,042	5,922
Flexible Armoured Building	6,028	6,645	5,104	13,734	16,315	14,449	13,620	14,873
Other Building Wires	14,193	17,843	16,389	4,193	4,631	3,758	3,940	4,068
Flexible Cords and Fixture Wires	3,517	4,927	3,806	2,140	2,389	2,700	2,809	3,113
Service and Service Entrance Cables	1,386	2,567	1,551					
Rubber-Insulated and Plastic-Insulated								
Wires and Cables - General	6,312	4,902	4,112	3,101	4,053)	8,711	8,971	10,400
Other Wires and Cables	2,777	4,581	2,519	3,107	3,077)			
<u>Total</u>	150,732	186,519	153,846	136,812	150,574	149,796	149,602	167,043

Source: D.B.S. Cat. No. 43-209



PRICES OF SELECTED BASE METALS, BY COUNTRIES

	Aluminum Ingots			Copper Wire Bars			Lead Pigs		
	Canada	U.S.A. (b)	U.K. (c)	Canada (d)	U.S.A. (e)	U.K. (f)	Canada (d)	U.S.A. (g)	U.K. (h)
1954	19.00	19.95	18.98	29.20	29.19	30.38	13.35	13.68	11.77
1955	20.33	21.70	20.59	37.05	37.28	43.28	14.39	14.93	13.01
1956	23.42	24.11	23.75	41.35	41.45	40.47	15.51	15.76	14.29
1957	24.50	24.93	23.62	28.92	28.74	26.27	13.94	14.05	11.56
1958	22.75	24.17	22.21	25.43	25.39	24.09	11.34	11.75	8.86
1959	22.75	23.89	21.94	29.61	30.29	28.62	10.61	11.71	8.51
1960	23.25	25.21	22.55	30.25	31.47	29.92	10.68	11.59	8.77
1961	23.25	24.32	23.56	29.15	30.72	29.12	10.21	11.01	8.14
1962	23.63	24.85	24.05	30.96	33.14	31.37	9.92	10.29	7.54
1963	24.75	24.81	24.81	31.50	33.43	31.60	11.04	12.01	8.55
1964	25.75	25.89	26.16	33.34	34.89	47.43	13.40	14.69	13.58

- (a) F.o.b. smelter, freight paid to customer's plant in Canada  
(b) F.o.b. buyer's plant  
(c) Delivered  
(d) Canadian producers' price, delivered at Toronto or Montreal  
(e) U.S. Producers' price, delivered Connecticut Valley  
(f) London Metal Exchange (L.M.E.) price, warehouse; buyer pays transportation from warehouse. The L.M.E. price in 1964 does not reflect prices at which most sales were made. It is understood that in 1964 producers were selling copper delivered in Canada and in Britain at about the same price  
(g) U.S. producers' price, delivered New York  
(h) L.M.E. price, delivered main U.K. ports

Source: Yearbook of The American Bureau of Metal Statistics, New York American Metal Market, New York



APPENDIX C

SUMMARY CONTAINED IN SUBMISSION OF CANADIAN  
ELECTRICAL MANUFACTURERS ASSOCIATION



Summary Contained in Submission to Tariff Board by  
Canadian Electrical Manufacturers Association,  
November 12, 1963

---

"Summary:

"Notwithstanding the low level of physical imports (we will comment on the impact of foreign price competition hereunder) the evidence submitted will establish, we believe, that the Canadian electrical wire and cable industry is not nearly as healthy as it should be. The extremely low earnings in recent years produce a negligible return on investment, leaving little or no margin of reserve for future expansion or modernization. It is against this background that we itemize our reasons for recommending no change in the electrical wire and cable items before the Board in this reference.

"A. The Canadian industry sees no reason for altering the existing tariff schedule. Indeed we are somewhat at a loss to understand why the electrical wire and cable tariff items have been referred to the Board. We believe a case could be made, based on current conditions within the industry, for higher tariffs on some items; however, we judge that a request for increased rates would not be consistent with international objectives at this time, and we have refrained from seeking same. We are aware of no administrative problems requiring revision of existing terminology. During all the post-war years the industry has had only one divergence of opinion on interpretation with the Department of National Revenue, and this has been resolved in Appeal No. 554. We would like to add that if, and when, it becomes advisable to adjust our tariffs it is our opinion that Canada should not do so unilaterally. Such adjustments should be carefully negotiated by product and by country for the best reciprocal effect.

"B. Conversely, we submit that any major alteration on the existing electrical wire and cable items could well create administrative difficulties. We have explained that the industry's products comprise about 120,000 varieties of wire and cable. Any attempt at revising a schedule that has stood the test of administrative practice for many years would require exhaustive analysis of the 'before and after' effects of such changes. Consequently, in the absence of some very persuasive circumstances with which we are not acquainted, we believe the existing items should remain unchanged.

"C. We are particularly concerned about the question of production materials. As we construe the terms of reference contained in the Minister's letter of reference dated November 2, 1962, it appears that the Minister has not extended the Board's jurisdiction beyond an examination of those particular tariff items enumerated therein.

"In our view, it would be unwise to alter existing electrical wire and cable items without, at the same time, having due regard to the tariff status of the major production materials required by the Canadian industry. Insofar as tariffs are concerned we are sure the Board will appreciate that a delicate balance has been established, in the market place, between electrical wire and cable manufacturers on one hand, and their suppliers on the other. We do not believe there-

fore that existing rates on electrical wire and cable should be altered in any way without considering fully other tariff items which, if our interpretation is correct, are not within the scope of this reference.

"D. An analysis of imports during the past seven years shows that imports are averaging about \$11 million annually, of which about 35% were imported from the United States, and 30% from the United Kingdom. West Germany and Japan are striving to step up shipments to this country. During the same period our exports averaged about \$6 million annually.

"Canada's export-import pattern in electrical wire and cable is already imbalanced in favour of foreign competition. Tariff reductions in existing items would intensify this imbalance, and we see no strong likelihood of increasing exports to compensate for further losses in our domestic market. Cost advantages accruing to U.S.A. manufacturers from volume production runs notwithstanding their higher labour costs, make any sharp increase in exports to the United States unlikely. Higher labour costs in Canada, together with transportation charges, duty where applicable, and some effective non-tariff barriers combine to exclude us from invading the U.K., Western European and Japanese markets.

"E. Finally, we would stress that the degree of foreign competition can never be measured solely by computing the value of physical imports into Canada as a percentage of total Canadian consumption. Foreign competition, even if physical shipments to Canada were nil, generates a distressing impact by depressing Canadian prices, as domestic manufacturers strive to compete with foreign low-cost products.

"The impact on Canadian pricing by foreign competitors is acutely felt in the domestic industry. To illustrate, we are submitting confidentially a Schedule giving specific examples of orders lost to U.K. and Japanese competitors. It will be noted that notwithstanding existing tariff rates, foreign competition in each case undersold published prices of a typical Canadian manufacturer by margins ranging from 3.5 to 31.3%. The data shown on the confidential Schedule illustrates clearly the downward pressure on prices from foreign sources and helps to explain why the Canadian Price Index stands at 99 in relation to the 1957 base, notwithstanding higher wage levels and higher costs that have occurred since that year. This foreign competition, combined with the strong internal competition, result in the existing low-profit position of the Canadian industry.

"We fear that any tariff reductions would result either in a greater invasion of our market at the expense of the domestic industry, or alternatively, would compel Canadian manufacturers to reduce prices still further. We have noted above that 1961 showed the first signs of slight recovery for the industry from the depressed four-year period 1957-1960. We hope that 1962 will show continued improvement. Tariff reductions would, in our view, nullify in large measure the efforts of the industry during the past seven years to regain a more solvent position.

"For all of these reasons, we recommend that no change be made in either terminology or rates in any of the tariff items enumerated at the beginning of this submission.

Respectfully submitted,

CANADIAN ELECTRICAL MANUFACTURERS ASSOCIATION"(1)

(1) Transcript, November 13, 1963, p. 1292-6



APPENDIX D

TARIFF HISTORY

## Tariff History

B.P.

M.F.N.

## General

Tariff Item 342

Phosphor tin and phosphor bronze in blocks, bars, plates, sheets and wire

1906, November 30

5 p.c.

7½ p.c.

10 p.c.

Tariff Item 347b

Tungsten rod and tungsten wire for use in Canadian manufactures

1958, June 18

Free

Free

25 p.c.

Prior to June 18, 1958 this item was numbered 376c

1954, August 1

Free

Free

25 p.c.

Prior to August 1, 1954 this item was numbered 829a

1951, August 1

Free

Free

25 p.c.

Prior to August 1, 1951 tungsten rod was dutiable under tariff item 711 viz.:- All goods not enumerated in this schedule as subject to any other rate of duty, and not otherwise declared free of duty, and not being goods the importation whereof is by law prohibited.

1948, January 1 (GATT)

20 p.c.

1939, January 1, (United States  
Trade Agreement)

20 p.c.

1933, June 10 (Canada-France Trade Agreement)

Intermediate Tariff less  
a discount of 10 p.c.

1931, June 2

15 p.c.

25 p.c.

25 p.c.

Prior to August 1, 1951 tungsten wire was provided for under tariff item 350 (see history below).

Tariff Item 348f (GATT)

Copper covered steel wire not less than 0.1875 inch in diameter and copper covered steel rod, for use in the manufacture of trolley, telegraph and telephone wires, electric wires and electric cables

1957, March 15

Free

10 p.c.

35 p.c.

B.P.      M.F.N.      General

Prior to March 15, 1957 item 348f read:- Copper covered steel wire not less than one-quarter inch in diameter and rods, when imported by manufacturers of trolley, telegraph and telephone wires, electric wires and electric cables, for use only in the manufacture of such articles in their own factories.

1945, June 1	Free	10 p.c.	10 p.c.
--------------	------	---------	---------

Prior to June 1, 1945 drawn wire was classified under tariff item 350 (see history below).

Prior to 1945, rolled rods were classified under tariff item 348d, viz.:— Copper in bars or rods, when imported by manufacturers of trolley, telegraph and telephone wires, electric wires and electric cables, for use in the manufacture of such articles in their own factories.

1932, October 13	Free	10 p.c.	10 p.c.
------------------	------	---------	---------

Tariff Item 350 (GATT)

Wire of all metals and kinds, n.o.p.

1948, January 1 (GATT)		20 p.c.	
1939, January 1 (United States			
Trade Agreement)		30 p.c.	
1932, October 13	10 p.c.	30 p.c.	35 p.c.
1930, May 2	15 p.c.	17½ p.c.	20 p.c.

Tariff Item Ex. 350 (GATT)

Copper beryllium alloys, namely: ingots, sheets, plates, strips, bars, rods, tubes and wire

1956, June 30 (GATT)	Free	Free
----------------------	------	------

Prior to June 30, 1956 the material now provided for in tariff item Ex. 350 was classified under tariff item 350 (see history above).

Tariff Item 350a (GATT)

Electric resistance strip, ribbon, wire and wire cold rolled after drawing, containing from nineteen per cent to twenty-six per cent chromium, three per cent to seven per cent aluminum, one half per cent to four per cent cobalt, and remainder iron

1957, March 15	Free	Free	35 p.c.
1950, May 1, (GATT)		Free	



B.P.      M.F.N.      General

Prior to May 1, 1950 the material now provided for in tariff item 350a was classified under tariff item 350 (see history above), and under tariff item 401(g) at the following rates

1948, January 1 (GATT)	15 p.c.		
1932, October 13	20 p.c.		
1930, May 2	15 p.c.	17½ p.c.	20 p.c.

Tariff Item 351 (GATT)

Wire, single or several, covered with any material, including cable so covered, n.o.p.

1948, January 1 (GATT)	20 p.c.		
1939, January 1 (United States Trade Agreement)	27½ p.c.		
1930, May 2	20 p.c.	27½ p.c.	30 p.c.

Tariff Item 351a

Wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p.

1930, May 2	17½ p.c.	22½ p.c.	25 p.c.
-------------	----------	----------	---------

Tariff Item 351b (GATT)

Wire cloth, or woven wire of brass or copper

1948, January 1 (GATT)	20 p.c.		
1930, May 2	17½ p.c.	22½ p.c.	25 p.c.

Tariff Item 351c

Brass wire for the manufacture of fourdrinier wire or of paper-machine wire cloth

1959, April 10	Free	15 p.c.	35 p.c.
----------------	------	---------	---------

Prior to April 10, 1959 the item was worded as follows:-  
Brass wire, when imported by manufacturers of fourdrinier wires or of paper-machine wire cloth, for use exclusively in their own factories.

1939, April 26	Free	15 p.c.	35 p.c.
----------------	------	---------	---------

Prior to April 26, 1939 the brass wire provided for under tariff item 351c was classified under tariff item 350 (see history above).

B.P.M.F.N.GeneralTariff Item 353(d) (GATT)

Aluminum and alloys thereof:-

...  
 (d) Wire and cable, twisted or stranded or not, and whether reinforced with steel or not

1954, April 7	Free	22½ p.c.	30 p.c.
---------------	------	----------	---------

Prior to April 7, 1954 tariff item 353(d) was governed by the phrase, "Aluminum and alloys thereof, crude or semi-fabricated."

1950, June 1	Free	22½ p.c.	30 p.c.
--------------	------	----------	---------

Prior to June 1, 1950 the item was included in tariff item 353.

1932, October 13	Free	30 p.c.	30 p.c.
------------------	------	---------	---------

Tariff Item 354d

Aluminum covered aluminum alloy wire or rod, 0.375 inch or less in diameter, for use in the manufacture of wire less than 0.25 inch in diameter

1958, November 1	Free	Free	30 p.c.
1956, January 1	Free	3 cts.(lb.)	30 p.c.

Prior to January 1, 1956 the wire was dutiable under tariff item 353(d) (see history above)







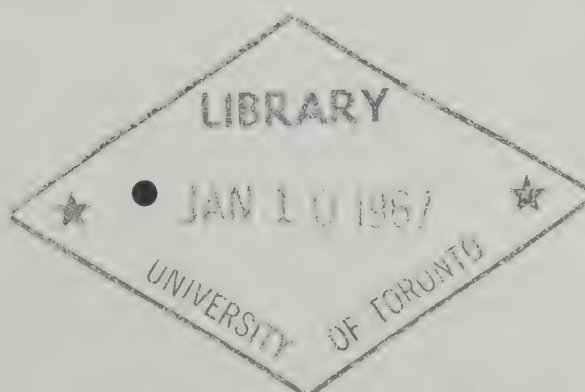




Report (by  
**THE TARIFF BOARD**

*in Reference*  
Relative to the Inquiry Ordered  
by the Minister of Finance  
respecting

**MACHINERY, APPARATUS, PRINTING PLATES AND  
RELATED PRODUCTS FOR THE PRINTING AND  
ALLIED INDUSTRIES**



**Reference No. 133**





CAI FN 55  
-66R33



Report by

**THE TARIFF BOARD**

Relative to the Inquiry Ordered  
by the Minister of Finance  
respecting

**MACHINERY, APPARATUS, PRINTING PLATES AND  
RELATED PRODUCTS FOR THE PRINTING AND  
ALLIED INDUSTRIES**



***Reference No. 133***

© Crown Copyrights reserved

Available by mail from the Queen's Printer, Ottawa,  
and at the following Canadian Government bookshops:

OTTAWA

*Daly Building, Corner Mackenzie and Rideau*

TORONTO

*221 Yonge Street*

MONTREAL

*Æterna-Vie Building, 1182 St. Catherine St. West*

WINNIPEG

*Mall Center Bldg., 499 Portage Avenue*

VANCOUVER

*657 Granville Street*

or through your bookseller

A deposit copy of this publication is also available  
for reference in public libraries across Canada

Price \$2.75

Catalogue No. FT4-133

*Price subject to change without notice*

ROGER DUHAMEL, F.R.S.C.

Queen's Printer and Controller of Stationery

Ottawa, Canada

1966

## THE TARIFF BOARD

---

L.C. Audette, Q.C.	Chairman
G.H. Glass	First Vice-Chairman
F.L. Corcoran, Q.C.	Second Vice-Chairman
G.A. Elliott	Member
E.C. Gerry	Member
Léo Gervais	Member
A.DeB. McPhillips	Member

J.E. Gander	R.F. Lalonde
Director of Research	Secretary

---

## PANEL FOR THIS INQUIRY

G.H. Glass, Presiding  
E.C. Gerry  
A.DeB. McPhillips

---

## ECONOMISTS

J.W. Morrow, Assistant Director of Research, and  
V.R. St. Louis





The Honourable Mitchell Sharp, P.C., M.P.  
Minister of Finance  
Ottawa

Dear Mr. Sharp:

I refer to Mr. Nowlan's letter of March 25, 1963, in which he requested the Tariff Board to conduct an inquiry respecting machinery, apparatus, printing plates and related products for the printing and allied industries.

In conformity with Section 6 of the Tariff Board Act, I have the honour to transmit the Report of the Board relating to machinery, apparatus, printing plates and related products for the printing and allied industries, in English and in French. A copy of the transcript of the proceedings at the public hearings accompanies this Report.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "J. C. Audette". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Chairman



# TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	11
THE PRODUCTS, THE SUPPLIERS AND THE USERS	13
The Products and the Suppliers	14
The Users	23
THE MARKET	27
Printing Presses and Parts	29
Other Machinery and Equipment	30
Printing Plates, Moulds and Transfers	34
Materials for Printing Plate Makers	41
Type for Printing	46
Type Metal and Babbit Metal	46
CONSIDERATIONS RESPECTING THE PRINTING AND ALLIED INDUSTRIES	47
Printers and Publishers	47
Makers of Printing Plates	53
Producers of Blank Plates	55
THE PRINCIPAL REPRESENTATIONS	57
THE PROPOSALS IN DETAIL	65
Printing Presses and Parts	65
Typesetting and Typesetting Machinery and Apparatus	71
Other Machinery and Apparatus	74
Printing Plates, Moulds and Transfers	82
Materials for Printing Plate Makers	88
Type for Printing	93
Type Metal and Babbit Metal	94
Other Proposals	94
<hr/>	
SUMMARY AND CONCLUSIONS	97
RECOMMENDED SCHEDULE	101
NOTES ON RECOMMENDED ITEMS	107
NOTES ON EXISTING ITEMS	117



TABLE OF CONTENTS  
(Cont'd)

	<u>Page</u>
APPENDICES	
A      Statistics of Imports and Exports	129
B      Analysis of Imports Entered under Tariff Item 41205-1	167
C      Imports of Printed Matter, by Kinds and Selected Years	175
D      Financial Data Pertaining to the Printing and Allied Industries	179
E      Canadian Producers of Machinery and Apparatus Included in Reference 133	185
F      Canadian Factory Shipments of Principal Paper and Paperboard Products, by Selected Years	189
G      Tariff History	191

Explanation of Symbols Used

- Denotes zero or none reported
- .. Indicates that figures are not available
- \* In statistical tables, indicates a reported figure which disappears on rounding, or is negligible
- (a) A small letter in brackets denotes a footnote to a table
- (1) A number in brackets denotes a footnote to the text
- s.c. Denotes a Dominion Bureau of Statistics import or export statistical class

Change of Tariff Item Numbering, August 23, 1965

<u>Old Number</u>	<u>New Number</u>	<u>Old Number</u>	<u>New Number</u>
302	30200-1	473a	47305-1
340	34000-1	474	47400-1
341	34100-1	475	47500-1
346b	34610-1	475a	47505-1
412	41200-1	475b	47510-1
412a	41205-1	475c	47515-1
412b	41210-1	475d	47520-1
412c	41215-1	475e	47525-1
412d	41220-1	534b	53415-1
412e	41225-1	660	66000-1
472	47200-1	660a	66005-1
473	47300-1	660b	66010-1

References to Transcript of Proceedings

This Report contains a number of quotations from the Transcript of Proceedings at the Public Hearing on Reference 133, Ottawa, 1965. They are identified simply by the appropriate page number inserted in brackets immediately after the quotations.



THE TARIFF BOARD

## Reference No. 133

An Inquiry Respecting Machinery, Apparatus, Printing Plates and  
Related Products for the Printing and Allied Industries

The text of the letter from the Minister of Finance, dated March 25, 1963, directing the Board to conduct an inquiry respecting machinery, apparatus, printing plates and related products for the printing and allied industries, is as follows:

"The Government has received a number of representations respecting items in the Customs Tariff relating to machinery and apparatus used by the printing industry. It has been suggested that in view of developments which have taken place in recent years these items are in need of review and revision.

"I, therefore, direct the Tariff Board to make a study and report under section 4(2) of the Tariff Board Act on the following tariff items in Schedule "A" of the Customs Tariff:

302	412e	475c
340	472	475d
341	473	475e
412	473a	534b
412a	474	660
412b	475	660a
412c	475a	660b
412d	475b	

"The Board's study should include tariff item 346b in so far as it relates to zinc strip or sheet for the production of printing plates, and other tariff items in so far as they relate to strip, sheet or plates, processed or not, for the production or printing plates. The Board may also include in its study any other items in so far as it considers them relevant to its enquiry.

"If the Board's study should indicate that amendments to the Customs Tariff are desirable, I would request the Board to prepare a revised schedule of tariff items, with recommendations as to rates of duty."

A public hearing before the Board was held at Ottawa from February 1 to February 5, 1965, inclusive. Representations were made to the Board from the following organizations:

Addressograph-Multigraph of Canada Limited, Toronto, Ont.  
American Wringer Company, Farnham, Que.



Ashton Press Manufacturing Company Limited, Montreal, Que.  
 Association of British Manufacturers of Printers' Machinery,  
 The, and The Association of Manufacturers and Suppliers  
 for the Graphic Arts, England

Bomac Electrotpe Company Limited, Toronto, Ont.  
 Booth, W.E., Company Limited, Toronto, Ont.

Cameron Machine Company, Dover, New Jersey  
 Canadian Book Manufacturers Institute, Toronto, Ont.  
 Canadian Daily Newspaper Publishers Association, Toronto, Ont.  
 Canadian Electrical Manufacturers Association, Toronto, Ont.  
 Canadian Fine Color Company Limited, Toronto, Ont.  
 Canadian Johns-Manville Company Limited, Port Credit, Ont.  
 Canadian Kodak Sales Limited, Toronto, Ont.  
 Canadian Paper Box Manufacturers Association Incorporated,  
 Toronto, Ont.  
 Canadian Pulp and Paper Association, Montreal, Que.  
 Canadian Weekly Newspapers Association, The, Toronto, Ont.  
 Commercial Litho Plate Graining Limited, Montreal, Que.  
 Coutts, William E., Company Limited, Toronto, Ont.

Dashew Business Machines (Canada) Limited, Toronto, Ont.  
 Du Pont of Canada Limited, Montreal, Que.

Farrington Business Machines (Canada) Limited, Don Mills, Ont.

Grace, W.R., and Company of Canada Limited, Cooksville, Ont.  
 Graphic Arts Industries Association, Ottawa, Ont.

Hydraulic Machinery Company Limited, Montreal, Que.

Industry Committee for the Study of Reference 120 - Chemicals,  
 Ottawa, Ont.  
 Institute of Business Form Manufacturers, The, Toronto, Ont.

Latimer Limited, Toronto, Ont.  
 Lion Rubber and Plastics Limited, Montreal, Que.

Machinery and Equipment Manufacturers' Association of Canada,  
 Montreal, Que.  
 McDowell, Joseph, Sales Limited, Toronto, Ont.  
 McGraw Colorgraph Company, Los Angeles, California  
 Miner Rubber Company Limited, Granby, Que.  
 Minnesota Mining and Manufacturing of Canada Limited, London,  
 Ont.

National Hard Chrome Plating Company Limited, Weston, Ont.

Periodical Press Association, Toronto, Ont.

Rapid Grip and Batten Limited, Toronto, Ont.  
 Roto-Tone Gravure Service Limited, Cooksville, Ont.  
 Rubber Association of Canada Limited, The, Toronto, Ont.

Sonoco Products Company of Canada Limited, Brantford, Ont.

Union Carbide Canada Limited, Toronto, Ont.

Varityper of Canada Limited, Toronto, Ont.

THE PRODUCTS, THE SUPPLIERS AND THE USERS

This Report is concerned with a broad range of machinery and equipment used in the printing and allied arts or in the conversion of paper, cardboard or foil into finished products. It is also concerned with printing plates and related products, with type for printing, and with type metal and babbit metal.

The Canadian market for all these goods is now of the order of one hundred million dollars annually, about half of it consisting of machinery and equipment and a large part of the remainder consisting of printing plates and related products.

Printing presses of all kinds, the market for which amounts to some \$20 million annually, are among the principal types of machinery and equipment under review. A broad range of other machinery and equipment is also included, for the most part in tariff items with end-use restrictions. These latter tariff items encompass most of the specialized machinery and equipment used by the printing and allied industries, whether for operations prior to printing, such as the production of printing plates, or for converting operations such as book-binding, cutting, perforating, drilling or glueing. The requirements of other converters, including manufacturers of paper bags, cardboard cartons and many other products, are also provided for to the extent that they use similar machinery and equipment.

Printing plates and related products constitute the other principal area of concern in this Report. Before any imagery, textual or pictorial, can be printed it must first be incorporated in a printing plate which can be mounted on a printing press. A paper stencil upon which text has been typed is an example of a printing plate which any typist can make from a blank stencil. On the other hand, a set of metallic printing plates for a multi-colour advertisement may cost \$1,500 or more, exclusive of the cost of the original art work. In addition to printing plates, the Reference encompasses moulds of printing plates, and exposed photographic film containing images to be projected onto printing plates. Blank plates and a few of the other materials used by makers of printing plates are also under consideration.

The machinery and equipment under review is for the most part not made in Canada, and the existing rates of duty appear to reflect this fact as well as a desire not to impose any unnecessary burdens on the printing and allied industries. Printing presses for newspapers and periodicals are duty-free while those for most other uses bear a most-favoured-nation duty of 10 p.c. Most of the other machinery and equipment in the Reference is duty-free.

Printing plates and related products of most kinds are, on the other hand, made in Canada, and users rely largely on Canadian sources of supply. The rates of most general application on printing plates are Free or 10 p.c., B.P. and 15 p.c., M.F.N.; however, there are several end-use items permitting publishers of periodicals and certain other users to import their requirements duty-free.



The printing and allied arts are going through a period of rapid technological change. In some instances, of which typesetting is an example, machinery and equipment not provided for in the tariff items under review have been introduced. The Board was told of developments in printing which might eventually lead to the replacement of printing presses by machines based on principles not contemplated when the tariff items relating to printing presses were created. New materials for printing plates and related products have been introduced, and some of the materials previously used have become outmoded.

The issues before the Board relate mainly to the choice of goods, if any, for which special provision should be made and what the rates of duty should be. A number of proposals were made to broaden the scope of the existing tariff items, partly to take account of technological changes which have occurred in the printing and allied arts and partly to encompass additional converting operations. There were differences of opinion as to whether some users should be entitled to import at lower rates than others and, if so, which users should be favoured. There were, in addition, differences between Canadian manufacturers and users respecting rates of duty.

### The Products and the Suppliers

#### Printing Presses

There are many varieties of printing presses, but most of them are of the following basic types:

- Letterpress, or relief, printing presses. These are designed for printing from printing plates or type with the areas to be printed raised above the remaining surface.
- Lithographic, or offset, printing presses. These are designed for printing from printing plates with the areas to be printed on substantially the same plane as the remaining surface. The areas to be printed on such printing plates attract ink while the remaining surface does not. The term "offset" is used because the inked printing plate is not pressed directly on the paper to be printed, but rather on a rubber blanket which is then brought into contact with the paper.
- Gravure, or intaglio, printing presses. These are designed for printing from printing plates on which the areas to be printed are etched or otherwise incised below the surface of the plate.
- Screen printing presses. These are designed for printing from a printing plate composed of a screen of silk, nylon or other material. All the surface of the screen except the areas to be printed are made impervious; ink is forced through the areas to be printed onto the paper.

Such machines, and others as well, are all classified as printing presses in the Customs Tariff. The term is taken to include, not only printing presses such as are found in commercial printing

establishments, but also many machines which the layman might not think of as printing presses. For example, it includes mimeograph machines, spirit duplicating machines and addressograph machines.

There are other machines, most of them in the developmental stage, which are designed for the same uses as printing presses but are operated on principles different from those of the printing presses now in use. However, the Board heard of only one type of machine in extensive commercial use which might be substituted for a printing press and which was classified elsewhere in the Customs Tariff. This machine was classified as photographic equipment under tariff item 46240-1, duty-free under both the British Preferential and Most-Favoured-Nation Tariffs.

Nearly all the printing presses used in Canada are imported; some highly specialized machines are produced in Canada, largely for export. The principal Canadian manufacturer is Ashton Press Manufacturing Company Limited, Montreal, which produces a line of machinery for making business forms. These machines perform such functions as printing, interleaving and perforating, to produce a continuous set of business forms from a web of paper. The company has been successful in selling abroad, and its exports are much larger than its domestic sales.

Addressograph-Multigraph of Canada Limited, Toronto, assembles small offset presses in Canada. It also assembles addressograph machines, some of which are classified as printing presses for Tariff purposes.

The Board heard of a number of other firms which were producing, or were planning to produce, printing presses of one kind or another in Canada. At present, however, their combined production is extremely small.

Parts of printing presses are normally made in the country of origin of the press, so that the market for Canadian-made parts is small. Ashton Press manufactures many of its own requirements. However, there are two types of parts in general use which require frequent replacement and which are now made in Canada. One is rubber blankets for offset presses; the other is replacement covers for printing press rollers.

An offset rubber blanket is mounted on rolls attached to the printing press, and it serves to transfer ink from the printing plate to the paper. Production was undertaken recently by Miner Rubber Company Limited, Granby, Quebec, but the company does not as yet supply much of the market. The Board also heard of companies which are making blankets in Canada from imported blanketing.

Printing press rollers are used as intermediaries in the distribution of ink from the ink fountain to the printing plate, and they are usually covered with rubber, plastic or gelatine compounds. While the roller normally lasts for the life of the press, the covering must be replaced from time to time. The re-covering of printing press rollers is done by a number of companies in Canada. This re-covering business is estimated at between one and two million dollars annually, and some four-fifths of it is done in Canada.



## Other Machinery and Apparatus

The tariff items under review also include most of the other specialized machinery and apparatus used in commercial printing, book-binding, typesetting, and in making printing plates;<sup>(1)</sup> a great variety of this machinery and apparatus is also used in the conversion of paper, cardboard or foil into products, of which cardboard boxes and paper bags are leading examples.

Tariff item 41205-1, under which most of these imports are entered, covers machines and apparatus for over thirty specified functions performed by printers and converters, including bookbinding, creasing, cutting, glueing, sheet piling, tying and bundling; it also encompasses most of the machinery and apparatus used in making printing plates and related products. There are, in addition, the mechanical deliveries and conveyors specified in tariff item 41200-1, the machines designed to fold or sheet-feed in tariff item 41210-1, and the typesetting and typesetting machines in tariff item 41215-1.

A list of Canadian firms known to be making any of the goods covered by these tariff items is presented in Appendix E. On the basis of extensive inquiries it appears doubtful that more than ten or fifteen per cent by value of the Canadian market for these goods is produced in Canada. Some types or sizes of some of the goods are known to be made in Canada; this applies, for example, to machines and apparatus for making business forms, for cutting, slitting, rewinding, jogging, coating, gathering and bookbinding, and to some of the goods used in the production of printing plates. None of the typesetting or typesetting machines specified in tariff item 41215-1 is made in Canada.

## Printing Plates, Moulds and Transfers

Tariff items relating to the following products are under review:

Original printing plates, including those for relief, offset, gravure and screen printing

Duplicate relief printing plates of rubber, plastic or other materials including stereotypes, electrotypes and copper shells, and bases therefor

Matrices and other moulds taken from relief printing plates

Transfers, including exposed film and reproduction proofs, for making printing plates

These products are all distinguished by the fact that imagery has been incorporated in them. Blank plates and other materials for use in making printing plates, moulds and transfers are dealt with elsewhere in this Report.

Printing plates, moulds and transfers in most of the commonly used materials and for most common uses, are provided for in tariff items 47200-1, 47300-1, 47305-1, 47400-1, 47500-1, 47505-1, 47510-1,

---

(1) The phrase "making a printing plate" refers to the various processes involved in the application of imagery to a blank plate or sheet

47515-1, 47520-1 and 47525-1. An industry employing over 5,000 people in Canada is engaged in the production of printing plates, moulds and transfers; additional employment in this kind of work is provided by each of several hundred newspaper printers in Canada, and by others as well.

Most printing plates, as has already been indicated, are of the relief, lithographic, gravure or screen varieties. All four types are in common use, and each is competitive with some of the others, at least in the production of some kinds of printed matter. Relief, or letterpress, is the longest established form of printing and probably accounts for the greatest volume; for example, most newspapers are printed by letterpress. Lithographic printing plates are generally the least expensive, and this gives offset printing an advantage where short or medium lengths of run are involved; in the past few years lithography has increased the most in volume and scope. Gravure printing plates are the most costly, and gravure printing is used principally for very long runs of multi-colour printing. Screen printing is not used as widely as the others; its chief use is in the production of large and brightly coloured display advertising material and for printing on objects which cannot be printed on other kinds of presses.

Duplicate printing plates rather than the originals are normally mounted on the press for letterpress printing. In setting up a newspaper page, for example, composed type and an original or duplicate printing plate of a photograph or advertisement may be assembled and locked in a frame known as a chase; the result is called a form in the trade. Matrix paper is pressed against the completed form to make a mould, or matrix. Type metal is then poured on the matrix to produce a metal stereotype for mounting on the printing press. Electro-types are similar in function to stereotypes, but they are usually used where longer runs or finer printing is required. Copper shells are partly finished electrotypes. A variety of moulding materials in addition to matrix paper are in common use, the choice depending upon the quality of printing required and other factors.

The word "transfer", which appears in tariff items 47200-1 and 47520-1, was said at the public hearing to be obsolete, but an exact substitute is hard to find. It embraces certain goods, other than printing plates or moulds, bearing text or other imagery to be incorporated in a printing plate. A custom typesetter, or trade compositor, may sell the results of his work simply as a paper proof made by inking the type he has composed and pressing a piece of paper against it on a proof printing press; this is a form of transfer. Or, a transfer may consist of an exposed film of the imagery which is to appear on the printing plate; there are specially designed photosensitive materials on the market for this use. Many printers are equipped to make offset printing plates from transfers; as a consequence, the trade in transfers has increased with the growth of lithographic printing.

The valuation of printing plates and related products presents certain problems, some consideration of which is of assistance in interpreting the statistics of production and trade.



The work incorporated in printing plates, moulds and transfers includes not only the application of imagery to a plate and the production of moulds and transfers, but also the creation of the imagery, whether by an artist, a photographer or a typesetter. Clearly, the value assigned to the final product, or copy thereof, will depend in part upon whether or not the cost of the creative work is taken into account. The printing plate maker generally receives the imagery from his customer or from an agent of his customer, and the price he charges for his work normally excludes the cost of the imagery. In fact, even when the printing plate maker produces the imagery himself, as he sometimes does, he usually makes a separate charge for this service and does not include it in the price of the printing plate, mould or transfer. The statistics of Canadian shipments pertaining to printing plates reflect the value of the mechanical and technical work of the printing plate maker, excluding the value of the imagery.

In the case of imports, the method of valuation depends in part upon whether or not the imagery involved is for printing in the country of origin as well as in Canada. Most imports, such as imagery for advertisements or for the printing of books, are for use in the country of origin as well as in Canada; in such cases, no attempt is made to assess the cost of the particular imagery; instead, the services of the printing plate maker are valued at as much as double the amount charged by him.

On the other hand, the dutiable value of an imported printing plate, mould or transfer bearing an image made specially for the importer would include the total value of the art work or typesetting. In that sense, the protection accorded the Canadian commercial artist or typesetter is contained in the tariff items relating to printing plates, moulds and transfers. This applies with particular force to the typesetter, because when typesetting enters into international trade it is almost invariably in the form of a printing plate, a mould or a transfer. The work of the commercial artist may be imported simply as a painting or as an ordinary photograph.

In this Report, the value of custom typesetting or trade composition done in Canada, and the value of shipments of printing plates, moulds and transfers do not include the value of art work incorporated therein.

Printing plates, moulds and transfers of all kinds are made in Canada, and Canadian producers supply most of the market. Statistics of shipments and trade in 1963 are presented on the following page.

The statistics of shipments do not, of course, include production by printers for their own use. Newspaper printers, for example, normally do their own typesetting and produce their own stereotypes; and many of them are equipped to produce printing plates of news pictures as well. Some of the other large printers also produce most of their own printing plates.

Printing Plates, Moulds, Transfers and Trade Composition  
Shipments and Trade, 1963

<u>Goods</u>	Canadian Factory <u>Shipments</u>	<u>Imports</u> (a)	<u>Exports</u>
	(thousands of dollars)		
Offset or lithographic printing plates	9,966 )		
Electrotyping, stereotyping, rubber and composition plates	6,025 )	3,147	352
Photo-engraving	14,256 )		
Syndicated Services	1,048 )		
Trade composition or typesetting	11,422 )		
Total	42,717	3,147	352

(a) Includes some imports of blank plates

Source: D.B.S. Cat. No. 36-203, 65-007 and 65-004

Nearly all the Canadian factory shipments of printing plates, moulds, transfers and trade composition are from plants engaged in platemaking, typesetting and trade bindery, selected statistics of which follow:

Selected Statistics of the Platemaking, Typesetting and  
Trade Bindery Plants, 1963

<u>Province</u>	<u>Estab- lish- ments</u> No.	<u>Total Employees</u> No.	<u>Salaries and Wages</u> (\$'000)	<u>Cost of Materials, Fuel and Electricity</u> (\$'000)	<u>Value of Shipments</u> (\$'000)
Nova Scotia	4 )	47	217	89	494
New Brunswick	1 )				
Quebec	84	1,793	9,557	3,612	17,502
Ontario	155	3,089	18,465	6,253	31,832
Manitoba	21	172	846	265	1,410
Saskatchewan	5	11	58	32	142
Alberta	16	123	595	300	1,211
B.C.	22	221	1,292	335	2,144
Total	308	5,456	31,030	10,887	54,735

Source: D.B.S. Cat. No. 36-203

Of the total value of shipments by these industries, some \$39 million consisted of printing plates, moulds, transfers and trade



composition; the remaining \$16 million consisted of commercial printing, bindery, art work and other services. These industries, as the statistics in the table above indicate, are composed of a large number of relatively small firms; there is, however, a considerable diversity of size among the firms, and also a good deal of specialization.

The firms engaged in making printing plates, moulds and transfers, herein referred to as printing plate makers, include a small number of large firms, based mainly in Montreal or Toronto, and a large number of small firms. While many of the smaller firms are also in Montreal or Toronto, some are located in other centres from coast to coast. The large firms, including Rapid Grip and Batten Limited and Bomac Electrototype Company Limited, each having plants at Montreal, Ottawa and Toronto, do much of the printing plate work connected with national advertising and magazine and book publishing, in addition to which they have a share of the local work in the centres where they are located.

A considerable part of the work of the printing plate maker is connected with advertising. He usually receives the imagery from an advertising agency or a customer, and converts it into a form which the printer can use. The finished work must meet extremely high standards; it usually involves complex photographic processes and a considerable amount of hand finishing by skilled craftsmen.

Some of the larger printing plate makers have facilities for producing matrices in volume from printing plates for distribution to newspaper printers; matrices of a national advertisement or a syndicated feature may have to be distributed to three hundred newspapers. Printing plate makers may also be equipped to produce large numbers of electrotypes from moulds taken from original printing plates; this is essentially an electrolytic process. For example, each page of a telephone directory is printed from a separate electrototype. Rubber printing plates have been used to an increasing extent in recent years; they are now produced in large quantities by some of the bigger printing plate makers.

Many of the smaller printing plate makers perform some of these services for printers of newspapers and other printed matter in their localities. They may, for example, supply the printer with the photo-engravings he requires; they may make offset printing plates from transfers for printers not equipped to do this work.

There are several printing plate makers which specialize in the production of gravure printing plates and cylinders. The trade binderies, previously classified with commercial printing are now with the platemaking and typesetting firms.

Trade composition, or custom typesetting, is performed by a separate group of firms. It calls for a considerable investment in typesetting machines, type, proof presses and other goods, and these assets can be more fully utilized by a trade compositor than by an individual printer. As a result, with the exception of the work done by newspaper publishers and a few of the largest commercial printers, most typesetting is now done by trade compositors.

A striking feature of the platemaking, typesetting and trade binding industries is the amount by which the materials used are enhanced in value by processing. In 1963, when these industries spent \$11 million on materials, fuel and electricity, they paid out \$31 million in salaries and wages, and their shipments were valued at \$55 million. A great deal of highly skilled and highly paid labour is involved in the production of the products of these industries.

Materials Used - The materials used in making printing plates, moulds and transfers include blank plates and sheets of various materials for printing plates, and matrix paper and other moulding materials. Photographic film and other general supplies are also used, but they are not considered in any detail in this Report.

The tariff items under review have come, over the years, to provide for some, but by no means all, of the materials used in making printing plates and moulds. Engravers' plates, rolls and cylinders of metal are specified in tariff item 47200-1. As the item is administered, engraving is taken to involve etching or cutting into the surface of the metal; with this interpretation, the item covers the blank plates used in making letterpress and gravure printing plates, but it excludes most of those used in making offset printing plates. Tariff item 66005-1 provides for a blank plate used mainly on electronic photo-engraving units. Tariff item 66010-1 covers a particular kind of blank plastic plate imported under the trade name "Dycril". Tariff item 30200-1 provides for lithographic stones not engraved; they were formerly used for making offset plates, but they have long been replaced by other materials. Tariff item 66000-1 covers one particular kind of moulding material. Finally, most of the zinc strip or sheet used in making zinc blank plates is specially provided for in tariff item 34610-1. Zinc is the material most commonly used in metallic relief printing plates, and it is used in some lithographic printing plates as well.

Other materials used in making printing plates, moulds and transfers are covered by tariff items of more general application. One such material is aluminum sheeting which is widely used for blank offset plates. Most rubber, plastic and paper materials used in making printing plates and moulds are also classified elsewhere in the Customs Tariff. The same applies to photographic film and other supplies.

Most of the metallic blank plates used in printing plates are made in Canada, but many of other materials are imported. Most of the materials used for moulds are also imported.

The finishing of zinc and copper for engravers' plates has for many years been done by two distributors of printing supplies located in Toronto, W.E. Booth Company Limited<sup>(1)</sup> and Latimer Limited. Grinding and polishing are the operations involved. Zinc sheet in the required quality is not rolled in Canada, and is imported duty-free under tariff item 34610-1; the copper sheets are obtained from Canadian sources.

---

(1) Now Booth Supply Limited



Canadian Fine Color Company Limited, Toronto, and Commercial Litho Plate Graining Limited, Montreal, prepare aluminum and zinc sheets for offset printing plates by a process known as graining. The process involves roughening the surface of the metal in a particular way to make it less water repellent. Grained aluminum sheets account for the greater part of the market for blank metallic plates for offset printing plates. Minnesota Mining and Manufacturing Company of Canada Limited, London, Ontario, produces certain sizes of a line of pre-sensitized aluminum offset plates, coated with a photo-sensitive material and ready to receive an image.

There are other kinds of blank plates produced in Canada as well, including gravure plates and cylinders and some rubber and paper blank plates. Blank addressograph plates and credit cards are also produced in Canada. There are, in addition, a number of companies producing rubber moulding materials, although most paper and plastic moulding materials are imported.

Type For Printing - Type for printing consists of a rectangular piece of metal, or occasionally wood, bearing a letter or other character in relief. Type can be purchased in individual pieces, but it is usually purchased in sets, or fonts. It is provided for in tariff item 34000-1.

The market for type is not very large, probably amounting to between \$500,000 and one million dollars annually. The reason it is not larger is that typesetters normally cast and compose type in one operation, the results of their work usually entering into trade as printing plates, moulds or transfers rather than as type. There is, in addition, a large trade in the matrices, or moulds, from which type is cast; they are imported as parts of the typesetting machines for which they were designed.

Most imports of type consist of designs the matrices of which, for one reason or another, are not available for use in Canada. The type may, for example, be a new or seldom used design for which matrices have not been produced, either because of copyright restrictions or insufficient demand. There are no designers of type in Canada.

There are, however, possibly as many as a dozen companies in Canada, many of them engaged principally in trade composition, which produce type from imported matrices and stock it for sale. They produce this type on the same standard typesetting machines that they use for their work of trade composition. The sales of type by these companies are widely distributed across Canada, most printers buying it from time to time. A printer who does not normally do his own typesetting will occasionally want small quantities of type, perhaps to set up an advertisement by hand; a printer who does his own typesetting may want a particular design of type which is not in sufficient demand to warrant investment in the matrices. However, as more printers come to rely on trade composition for their typesetting, the demand for type declines relative to the total amount of typesetting done.

## Type Metal and Babbit Metal

Type metal, as the term is used in tariff item 34100-1, includes a number of lead base alloys which are used in casting type and stereotypes, as well as for plate backing. Babbit metal happens to be provided for in the same tariff item, although little of it is used by the printing or allied industries; it is a series of tin base and lead base alloys used for lining and anti-friction purposes in machinery.

There are a number of manufacturers of non-ferrous alloys who produce type metal and babbit metal, as well as other alloys. Among the largest of these are The Canada Metal Company Limited and Federated Metals Canada Limited, both of Toronto and both with branch plants in other centres. These firms buy new and scrap non-ferrous metals, including lead, copper, tin and antimony, and blend them into alloys for use by plumbers, battery manufacturers, machinery manufacturers, printers and others. Canadian factory shipments of babbit metal amount to about one million dollars annually, and those of type metal to about \$3.5 million. Imports are small.

Servicing is a major factor in supplying type metal. Each time the type metal is melted its composition changes slightly, and a metal-rich dross forms on the top. The suppliers of type metal buy the dross for re-processing, and they analyze the type metal stocks of their customers at frequent intervals. The compositions of the additional supplies they sell the customer are based on these analyses.

## The Users

The principal users of the goods under review are the printing and allied industries, the converters of paper, cardboard or foil and the many organizations which do some of their own printing or office duplicating.

There is no doubt that the printing and allied industries provide the largest market for these goods. While statistical evidence on the subject is meagre, they probably account for about half of total Canadian purchases of the machinery and equipment and considerably more than half of those of the printing plates and other process supplies. Altogether, expenditures by the printing and allied industries on all these goods in 1964 might have been of the order of \$60 million.

The principal statistics of the printing and allied industries are presented in the table on the following page. In 1963 salaries and wages amounted to \$376 million, and the total cost of materials, fuel and electricity amounted to \$316 million; paper accounted for a large part of this latter cost. Thus, while the goods under review do not constitute the principal cost of production for these industries they do constitute a significant element. Moreover, taken as a group, the printing and allied industries are among the largest manufacturing industries in Canada, accounting for about five per cent of total employment in all manufacturing industries. In 1964 weekly wages in these industries averaged \$97.00 as compared with \$83.00 in all manufacturing. Although Montreal and Toronto are the



# Principal Statistics of the Printing and Allied Industries, 1963

	Estab-lish-ments No.	Production and Related Workers No.	Total Employees No.	Salaries and Wages (\$'000)	Cost of Fuel, Electricity, Materials and Supplies (\$'000)	Value of Shipments of Goods of Own Manufacture (\$'000)	Value Added (\$'000)
<b>By Industry:</b>							
Commercial Printing Industries	1,975	23,934	33,480	160,124	166,297	416,530	252,604
Printing and Publishing Industry	732	15,400	32,038	161,761	100,121	389,739	289,505
Publishing Industry	451	-	5,213	23,568	38,622	99,478	61,303
Platemaking, Typesetting and Trade Bindery Industry	308	4,085	5,456	31,030	10,887	54,735	43,888
Total	3,466	43,419	76,187	376,483	315,927	960,482	647,300
<b>By Province or Region:</b>							
Maritime Provinces	159	1,763	2,992(a)	11,386(a)	6,791	27,537	20,760
Quebec	989	12,067	21,056	102,803	97,285	285,189	188,232
Ontario	1,480	22,469	39,196	202,212	166,382	495,112	330,966
Manitoba	200	2,219	3,888(a)	16,875(a)	14,110	42,466	28,395
Saskatchewan	127	875	1,432(a)	5,965(a)	3,923	14,339	10,431
Alberta	201	1,567	2,852(a)	12,827(a)	10,686	35,016	24,330
British Columbia, Yukon and N.W.T.	310	2,459	4,771	24,415	16,751	60,825	44,187
Total	3,466	43,419	76,187	376,483	315,927	960,482	647,300

(a) Excludes some data pertaining to owners and partners, but these are included in the total for Canada

Source: D.B.S. Cat. No. 36-203

principal centres of printing and publishing in Canada, the printing and allied industries provide employment throughout the country.

Another industrial group, the paper and paperboard converters, constitute a very substantial market for the goods under review. While this industrial group is engaged primarily in converting, many of its products contain printing; cardboard boxes are a case in point. Consequently, the converters provide a market for such printers' goods as printing presses and printing plates as well as for converting machinery.

There are several hundred converting establishments of one kind or another in Canada, and their value of shipments now exceeds \$700 million annually. They are spending more than \$100 million on salaries and wages and more than \$300 million on paper and other materials. Details of the products made by the converters are presented in Appendix F. The Canadian Pulp and Paper Association conducted a survey among its members, who manufacture cardboard boxes, paper bags and other paper products. Replies were received from 19 companies, many of whom undoubtedly operate more than one plant each. These companies reported that, over a recent five-year period, their imports of machinery and equipment under the tariff items in the Reference averaged about four million dollars annually; they undoubtedly spent additional sums on printing plates and related products. These figures take no account of the expenditures by the many converters who are not members of the Canadian Pulp and Paper Association; total expenditures by all converters on the goods under review are probably several times as large as those reported in the survey.

Expenditures by all others on the goods under review are not known, but they must be between \$15 and \$30 million annually. These expenditures are made by a large number of firms throughout industry, and would not generally be a major element of cost to individual firms.





THE MARKET

The goods under review are so disparate in character and origin that it is best to segregate them into a number of groups for purposes of analysis. Estimates of the markets for these groups of products are presented in the table below; in some cases they are based on statistics which are far from complete, but they serve to portray the orders of magnitude involved.

Goods Included in Reference 133,  
Estimated Canadian Market, 1964

Goods	Canadian Factory Shipments Imports Exports Apparent Consumption			
	(thousands of dollars)			
Printing presses and parts )		23,291)		
)	7,000	)	3,629	54,909
Other machinery and equipment)		28,247)		
Printing plates, moulds, transfers and trade composition	45,000	3,800	376	48,424
Blank plates and sheets (a)	4,500	3,400	100	7,800
Type and Type metal	4,000	201	-	4,201
Babbitt metal	1,200	21	-	1,221
Total	61,700	58,960	4,105	116,555

(a) Certain other materials for use in making printing plates are also under consideration, but no estimates of their values are available. On the other hand, the statistics in the table do include paper and plastic blank plates and sheets, some of which are not used by commercial printers

Source: See following tables

As the table indicates, most of the printing presses and other machinery and equipment are supplied from abroad. On the other hand, most of the printing plates and other process supplies are made in Canada, the principal exceptions being blank plates and sheets in some materials. Additional details of the market are presented in the following pages under a number of headings, beginning with printing presses and parts.

The Canadian Market for Printing Presses and Parts

Year	Canadian Factory Shipments of Printing Machinery	Imports of Printing Presses and Parts			Exports of Printing, Bookbinding Machinery and Parts			Domestic Disappearance
		For Newspapers Periodicals and Telephone Directories (b)		Other (c)	Canadian Produce	Foreign Produce		
		(thousands of dollars)						
1951	374	2,956	7,337	10,293	1	22	10,644	
1952	288	1,491	5,534	7,025	19	23	7,271	
1953	279	1,772	7,351	9,123	*	27	9,375	
1954	472	2,145	9,071	11,216	9	25	11,654	
1955	388	3,112	9,065	12,177	-	24	12,541	
1956	697	3,011	10,098	13,109	8	24	13,774	
1957	1,401	4,256	10,868	15,124	*	26	16,499	
1958	1,247	1,092	10,703	11,795	2	34	13,006	
1959	1,072	8,212	12,189	20,401	5	38	21,430	
1960	2,146	1,488	12,842	14,330	6	50	16,420	
1961	2,021	3,194	15,578	18,772	1,288	808	18,697	
1962	3,114 (a)	4,206	15,694	19,900	2,115	1,192	19,707	
1963	3,802 (a)	7,601	15,513	23,114	3,474	1,421	22,021	
1964	..	..	..	23,291	3,629	..	..	

(a) Printing, Bookbinding Machinery

(b) Tariff item 41200-1

(c) Tariff items 41210-1, 41220-1 and 53415-1

Source: D.B.S. Trade of Canada and Cat. Nos. 31-201 and 42-214

### Printing Presses and Parts

Statistics of the Canadian market for printing presses and parts are contained in the table on the preceding page. It will be noted that reported Canadian factory shipments, which amounted to \$3.8 million in 1963, consisted of "printing, bookbinding machinery", and included some goods other than printing presses. Most of the Canadian production of printing presses consists of the business form printing presses produced by Ashton Press, which exports well over half its output. With the exception of the few sold in Canada by that company, virtually all Canadian requirements of printing presses, amounting to about \$20 million annually, are imported.

The Canadian market for any particular type of printing press is apparently not large enough to warrant production in Canada. Any substantial printing press industry which does develop in Canada is almost bound to depend heavily on export sales. Mention has been made however, of office duplicating equipment and other small machines used in business. A few of these machines are now assembled in Canada and, in still fewer cases, some of the parts are made in Canada. The possibility of growth in this kind of activity in Canada cannot be excluded as the Canadian market for these smaller machines continues to expand.

During the five years 1959 to 1963, inclusive, imports of printing presses and parts averaged \$19.3 million annually, of which \$4.9 million were entered free of duty under tariff item 41200-1 for printing newspapers, periodicals and telephone directories. The United States supplied 74 per cent of all imports, Britain 14 per cent and West Germany 8 per cent. In 1964 imports were re-classified as follows:

#### Imports of Printing Presses and Parts by Principal Countries of Origin

	<u>United Kingdom</u>	<u>United States</u>	<u>West Germany</u>	<u>Others</u>	<u>Total</u>
	(thousands of dollars)				
Rotary printing presses and parts	3,390	4,023	170	12	7,595
Offset, lithographing presses and parts	352	5,863	1,780	789	8,784
Duplicating machines and parts	861	946	13	134	1,954
Other printing presses and parts	293	3,190	491	119	4,093
Blankets or blanketing for printing presses	132	702	2	29	865
Total	5,028	14,724	2,456	1,083	23,291

Source: D.B.S. Trade of Canada



Parts of Printing Presses - Statistics of total production and trade in parts of printing presses are not available separately, being included mainly with the complete machines. Ashton Press produces almost all the parts for its own machines, and Addressograph-Multigraph procures a few of its requirements of parts in Canada. Parts for imported printing presses are normally imported from the country of origin of the machine, exceptions being blankets and blanketing for offset presses, and replacement covers for printing press rollers.

Offset press blankets, which are covered by tariff item 53415-1 along with other press blankets and stereographers' and type-casters' blankets, are made of fabric coated on one side with a rubber composition. They are made to rigid specifications and are used on offset presses as intermediaries in transferring the image from the printing plate to the paper. Until 1965, no offset press blankets were made in Canada, all being imported under tariff item 53415-1. In 1964, total imports of blankets and blanketing entered under tariff item 53415-1 amounted to about \$865,000; of this, the Rubber Association of Canada estimated that the Canadian consumption of offset press blankets and blanketing amounted to about \$315,000.

The Miner Rubber Company has commenced production of offset press blankets, and in time it may supply a substantial part of the market. There are, in addition, firms which import blanketing and cut it to size for sale in Canada.

As mentioned earlier, the coverings of printing press rollers are subject to wear and must be replaced from time to time. There are several firms in Canada which re-cover rollers; one of these, American Wringer Company, Farnham, Quebec, estimated the market for new rollers and for replacement covers as follows:

Rubber-covered	\$700,000
Plastic-covered	\$565,000
Gelatine-covered	<u>\$435,000</u>
Total	\$1,700,000

Virtually all this market undoubtedly consists of the replacement covers. The company estimated that nearly one-fifth of the market was supplied by imports; in the case of rubber-covered rolls and rubber replacement covers, it estimated that imports supplied about one-third. The company stated that foreign competitors concentrated on obtaining the business of the largest accounts for re-covering, leaving the smaller and less profitable accounts to the Canadian firms.

#### Other Machinery and Equipment

The other machinery and equipment under review consists of the broad range of goods encompassed by tariff item 41205-1, the me-

chanical deliveries and conveyors in tariff item 41200-1, the type-casting and typesetting machines in tariff item 41215-1 and the machines designed to fold or sheet-feed in tariff item 41210-1.

Tariff Item 41205-1 and Mechanical Deliveries, Conveyors

Imports of all the goods entered under tariff item 41205-1 are reported together with the mechanical deliveries and conveyors entered under tariff item 41200-1, and it is for that reason that they are considered together in this Report. The combined statistics of imports are presented in the table below. Nearly all these imports, which have been averaging about \$15 million annually, have consisted of the goods provided for in tariff item 41205-1; it is estimated that mechanical deliveries and conveyors have accounted for less than one per cent.

Imports of Goods Entered Under Tariff Item 41205-1,  
And of Mechanical Deliveries and Conveyors  
Entered Under Tariff Item 41200-1<sup>(a)</sup>

<u>Year</u>	<u>United Kingdom</u>	<u>Switz- erland</u>	<u>United States</u>	<u>West Germany</u>	<u>Other</u>	<u>Total</u>
			(thousands of dollars)			
1956	292	36	10,341	456	60	11,185
1957	578	155	10,848	795	139	12,515
1958	406	168	9,638	1,081	164	11,457
1959	342	291	11,511	1,066	127	13,337
1960	625	256	12,439	1,137	305	14,762
1961	350	174	11,779	1,281	253	13,837
1962	428	384	13,543	818	353	15,526
1963	579	451	15,095	1,140	521	17,786

(a) Duty-Free imports in s.c. 5511; includes imports entered under tariff item 41225-1, but these are believed to be small

Source: D.B.S., Trade of Canada

Details of the kinds of goods entered under tariff item 41205-1 during the years 1961 and 1962 are presented in Appendix B, and are summarized in the table below. An examination of the details of the imports in Appendix B discloses that nearly all the provisions of tariff item 41205-1 were in active use during 1961 and 1962.

Production in Canada of the goods specified in tariff item 41205-1 and of the deliveries and conveyors specified in tariff item 41200-1 could not be determined with any exactitude, but the information which is available indicates that imports supply most of the

Canadian market. The largest Canadian producer from whom the Board heard was Ashton Press which makes collators, interleavers, stitchers, carbon coating equipment and other goods covered by tariff item 41205-1. However, the equipment made by Ashton is specially designed for the manufacture of manifold business forms, and most of it is exported. There are a number of producers of cutting machines in Canada, but the greater part of those used by the printing and allied industries is believed to be imported. Similarly, the Board learned of some production in Canada of machines for bookbinding, collating, jogging, coating, slitting and rewinding, and of certain items of equipment for making printing plates and for photographic work. In none of these cases, however, were Canadian producers offering a complete range.

Imports Entered Under Tariff Item 41205-1

	<u>1961</u>	<u>1962</u>
	(dollars)	
Machines and apparatus for making stereotypes and electrotypes	264,855	253,952
Engraving machines, other platemaking apparatus used in the manufacture of printing plates of all kinds	854,493	875,546
Machines and apparatus, including cameras and camera equipment, for transferring by photographic processes, or direct, to plates or rolls	635,564	448,366
Goods for box making	703,021	820,257
Goods for bag making	813,536	141,448
Machines and apparatus for:		
Bookbinding	510,932	1,008,458
Gathering	288,692	367,009
Creasing	346,146	573,653
Cutting	1,369,238	1,315,193
Slitting	519,994	754,984
Glueing	721,208	632,392
Other goods, mainly not identified	<u>6,763,017</u>	<u>8,259,592</u>
Estimated total	13,790,696	15,450,850

Source: Table 1, Appendix B



A large Canadian daily newspaper publisher provided the Board with a complete inventory of machinery and equipment which it had imported under tariff item 41205-1 for use in the production of newspapers, and indicated which of these goods it might have been able to obtain in Canada. The details of this inventory are contained in Table 2, Appendix B, and they disclose that very few of the goods involved were readily available from Canadian sources of supply.

### Typecasting and Typesetting Machines

Typecasting or typesetting machines are not made in Canada, most requirements being imported under tariff item 41215-1.

Imports: Typecasting and typesetting machines and parts therefor, for use in printing offices, s.c.  
5516; 1964, s.c. 526-20

Tariff item 41215-1

<u>Year</u>	<u>United Kingdom</u>	<u>United States</u> (thousands of dollars)	<u>Other</u>	<u>Total</u>
1956	6	2,732	2	2,740
1957	2	2,445	16	2,463
1958	12	2,286	28	2,326
1959	26	2,556	21	2,603
1960	27	2,633	12	2,672
1961	32	2,506	4	2,542
1962	23	2,737	7	2,767
1963	91	3,030	7	3,128
1964	73	4,301	37	4,411

Source: D.B.S. Trade of Canada

The imports have undoubtedly consisted mainly of linecasting machines such as the linotype, and typecasting machines such as the monotype. These machines enable an operator to cast and set relief type in one operation. There are also special machines in use for casting the larger, or display, sizes of type; such type must usually be set by hand. The moulds, or matrices, designed for use with a particular typecasting or typesetting-typecasting machine are supplied by the manufacturer of the machine, and they are imported as parts.

While linecasting and typecasting machines were designed for use in conjunction with relief printing, they are also used in setting type for commercial offset printing; after the type has been set in relief, a paper proof is taken of it, and the image on the proof is transmitted to an offset plate by photographic means. Phototypesetting

machines specially designed for use in conjunction with offset printing have, however, been developed, and some such machines are entered under tariff item 41215-1 along with other typesetting machines. There is, in addition, some equipment for typesetting, or for use in conjunction with typesetting, entered under other tariff items of more general application, and there is no record of the values involved.

#### Machines to Fold or Sheet-Feed Paper

Machines to fold or sheet-feed paper are provided for specifically in tariff item 41210-1; imports are estimated to have been as follows:

#### Imports of Machines Designed to Fold or Sheet-Feed Paper or Cardboard, and Parts(a)

<u>Year</u>	<u>United States</u>	<u>West Germany</u> (thousands of dollars)	<u>Other</u>	<u>Total</u>
1956	348	25	8	381
1957	738	26	69	833
1958	317	11	107	435
1959	475	33	59	567
1960	455	11	40	506
1961	689	38	101	828
1962	702	30	13	745
1963	1,043	20	13	1,076

(a) Dutiable imports under s.c. 5511

Source: D.B.S., Trade of Canada

Folding machines were made in Canada many years ago, but have not been made in recent years. The Board did not hear of any sheet-feeding machines which were made in Canada.

#### Printing Plates, Moulds and Transfers

The available statistics of shipments and imports of printing plates, moulds and transfers are presented in the two tables beginning on the following page. For reasons explained on page 18, shipments of trade composition are included as well.

The recorded shipments of printing plates, moulds and transfers which were valued at \$31 million in 1963, and of trade composition which were valued at \$11 million, exclude a considerable amount

Canadian Factory Shipments of Printing Plates,  
Moulds, Transfers and Trade Composition

Year	Offset Printing Plates	Electrotyping, Stereotyping, Rubber and Composition Plates	Photo-engraving (thousands of dollars)		Syndicated Services	Trade Composition or Typesetting	Total
			Photo-engraving	Engraving			
1950	..	5,023	9,021	357	..	4,177	18,578
1951	..	5,346	9,036	490	..	4,531	19,403
1952	..	5,910	9,344	313	..	4,957	20,524
1953	..	7,266	11,201	443	..	5,714	24,624
1954	..	7,647	11,053	453	..	6,100	25,253
1955	..	8,480	11,512	525	..	6,565	27,082
1956	..	9,787	12,783	613	..	7,887	31,070
1957	..	10,293	13,302	605	..	8,230	32,430
1958	..	11,274	13,729	541	..	7,946	33,490
1959	..	9,517	14,433	..	..	8,997	32,947
1960	7,339(a)	6,683	13,930	..	..	9,578	37,530
1961	8,564	5,909	14,969	..	..	9,862	39,304
1962	8,886	5,571	14,767	..	1,080	10,478	40,782
1963	9,966	6,025	14,256	..	1,048	11,422	42,717

(a) Included with electrotyping, stereotyping, rubber and composition plates prior to 1960

Source: D.B.S. Cat. Nos. 36-203, 36-212 and 36-209



Imports of Printing Plates, Moulds and Transfers

Tariff Item	Description of Goods	B.P.	M.F.N.	Imports				
				1951	1956	1961	1963	1964
				(thousands of dollars)				
For General Application or for Advertising:								
47200-1	Plates, rolls and cylinders engraved on wood, or on steel or other metal, and transfers taken from same, n.o.p.; engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates	10 p.c.	15 p.c.	750	881	1,641	1,813	1,713(a)
47300-1	Plates for printing in two or more colours, including electrotypes, nickeltypes and all engravings on steel or other metal, for use exclusively in printing, n.o.p.	Free	15 p.c.	293	215	230	244	180
47400-1	Stereotypes, electrotypes and celluloids, for almanacs, calendars, illustrated pamphlets, newspaper or other advertisements, n.o.p.; and matrices or copper shells for such stereotypes, electrotypes and celluloids, per square inch	1 ct.	1 ct.	155	144	99	74	..

Imports of Printing Plates, Moulds and Transfers (Cont'd)

Tariff Item	Description of Goods	B.P.	M.F.N.	Imports				
				1951	1956	1961	1963	
For General Application or for Advertising: (Cont'd)				(thousands of dollars)				
47505-1	Stereotypes, electrotypes, celluloids and bases for the same, composed wholly or in part of metal or celluloid, n.o.p., and copper shells for such stereotypes, electrotypes and celluloids, per square inch	1/8 ct.	1/8 ct.	53	31	32	23	..
47510-1	Matrices for stereotypes, electrotypes and celluloids described in item 47505-1, per square inch	Free	1/2 ct.	10 1,261	6 1,277	2 2,011	5 2,159	.. ..
	Total							37

(a) Includes engravers' blank plates

Imports of Printing Plates, Moulds and Transfers (Cont'd)

Tariff Item	Description of Goods	B.P.	M.F.N.	Imports			
				1951	1956	1961	1963 1964
				(thousands of dollars)			
<u>For Other Specified Purposes:</u>							
47305-1	Printing plates of all kinds for periodical publications enjoying second-class mailing privileges, the pages of which are regularly bound, wire-stitched or otherwise fastened together, and matrices, metal bases and copper shells therefor, but not to include printing plates and other articles covered by tariff item 47500-1	Free	Free	458	423	576	468 377
47500-1	Stereotypes, electrotypes, rubber plates and celluloids for books, and bases and matrices and copper shells for such printing plates; positive and negative films of periodical publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues	Free	Free	214	259	288	429 225
47515-1	Plates and electrotypes of metal and positive and negative films, for printing music	)	)	)			

Imports of Printing Plates, Moulds and Transfers (Cont'd)

Tariff Item	Description of Goods	B.P.	M.F.N.	Imports			
				1951	1956	1961	1963 1964
					(thousands of dollars)		
For Other Specified Purposes: (Cont'd)							
47520-1	Printing plates, n.o.p., whether for printing or lithographing, and transfers taken from same, and posi- tive and negative films, for use exclusively in the production of books which are included in the curriculum of any university, college or school in Canada, for use as text books or as works of reference, not to include dictionaries	Free	Free	43	33	34	91 ..
47525-1	Matrices of non-advertising news pictures for reproduction in news- papers and periodical publications enjoying second-class mailing privileges	Free	Free	23 738	5 720	5 903	* 988
	Grand Total			1,999	1,997	2,914	3,147
	Total						..

Source: D.B.S. Trade of Canada



of production for internal use. On the other hand, the imports, recorded at about three million dollars annually in 1962 and 1963, include an estimated \$500,000 of blank engravers' plates, so that actual imports were probably of the order of \$2.5 million, or about six per cent of the commerce in these goods. Exports of electrotypes, stereotypes and engravers' plates amounted to \$352,000 in 1963 and re-exports amounted to \$213,000. The re-exports undoubtedly consisted mainly of printing plates imported for use in Canada and then returned to the country of origin.

It is clear from the statistics that imports supply only a small part of the market. Moreover, judging from remarks made at the public hearing and from plant visits, most of the imports consist of text and other imagery created for use in the country of origin. They include printing plates, moulds and transfers of advertisements, catalogues, books and other printed matter already printed abroad. Virtually all the plate making connected with original Canadian material is done in Canada. In this connection, the evidence given by the spokesman for the Periodical Press Association was of particular interest, because there is no duty on imports of printing plates for periodicals. The spokesman for the Association said:

"Canadian publications purchase all their editorial plates that might be used for purely Canadian advertisers. They purchase all the engravings or plates in Canada, 100 per cent, and nothing is imported, in this respect, from the United States. So you have the situation that the only plates imported are those that are used in printing advertisements of United States companies and their Canadian subsidiaries." (page 777)

Moreover, by no means all the advertising by foreign-controlled companies is printed from imported printing plates. A survey of advertising in Chatelaine Magazine during the first six months of 1964 was reported at the public hearing. During that period, 83 per cent of the coloured advertising space and 87 per cent of the black and white advertising space had been printed from printing plates produced in Canada.

Some small part of the imports of printing plates, moulds and transfers undoubtedly consists of goods directly competitive with those produced in Canada. A producer of gravure printing cylinders and a producer of printing plates for textiles each complained of import competition.

Imports of printing plates, moulds and transfers, by countries of origin, are shown in the following table.

Imports of Printing Plates, Moulds and Transfers(a)

<u>Year</u>	<u>United Kingdom</u>	<u>United States</u>	<u>France</u> dollars	<u>Other</u>	<u>Total</u>
1956	33,894	1,947,175	411	15,414	1,996,894
1957	61,051	2,231,438	642	21,804	2,314,935
1958	38,445	2,038,312	1,655	32,505	2,110,917
1959	26,179	2,372,156	2,334	28,778	2,429,447
1960	35,825	2,578,932	851	39,468	2,655,076
1961	42,034	2,842,550	545	30,068	2,915,197
1962	33,961	3,073,086	1,783	44,810	3,153,640
1963	74,560	3,034,228	6,692	31,201	3,146,681

(a) Includes engravers' blank plates entered under tariff item 47200-1

Source: D.B.S. Trade of Canada

Most of the imports come from the United States, undoubtedly because of the closer commercial relations between Canada and that country.

Materials for Printing Plate MakersBlank Plates

Blank plates for making printing plates come in a number of different materials, and the sources of supply vary widely. While few statistics pertaining to the market for blank plates are available the following table contains estimates of the orders of magnitude involved.

Estimated Consumption of Blank Plates and Sheets, 1964

<u>Material and Use</u>	<u>Estimated Consumption</u> (dollars)	<u>Source of Supply</u>
Metallic engravers' plates, rolls and cylinders	600,000	mainly imported
Metallic offset	3,300,000	mainly domestic
Paper (offset and stencil)	3,000,000	mainly imported
Plates for graphotyping and credit) cards )	1,000,000	mainly domestic
)		
Rubber and plastic (relief and offset) )		
)		<u>mainly imported</u>
Estimated total consumption	7,900,000	

Most of the metallic engravers' plates are used by commercial printing plate makers, but it is unlikely that more than half by value of the other blank plates are so used. Some, such as the plates for phototyping and the paper stencils, are scarcely used at all in commercial printing. Additional information pertaining to the markets for the various kinds of blank plates are presented in the pages which follow.

Metallic Engravers' Plates, Rolls and Cylinders - These goods are all dutiable under tariff item 47200-1 at 10 p.c., B.P. and 15 p.c., M.F.N. Zinc and copper are the materials most commonly used in engravers' plates; engravers of gravure printing cylinders use steel rolls which are also dutiable under tariff item 47200-1.

Consumption of zinc engravers' plates is estimated at about 600,000 pounds annually, costing in the neighbourhood of \$400,000. Most zinc engravers' plates are now imported in finished form although some are produced in Canada.

Copper sheet, which is the principal other material used in making metallic engravers' plates, is produced in Canada and ground and polished by distributors in Canada. A number of other metals and combinations of metals, including steel, magnesium, steel-copper and steel-copper-chrome are used in engravers' plates.

Steel rolls for gravure printing cylinders are made in Canada by at least one metal working firm.

Metallic Offset Plates - These are made of several materials and combinations thereof including aluminum, zinc, steel, copper and chrome. Those of aluminum supply by far the largest part of the market.

Aluminum offset plates are generally sold either grained or pre-sensitized. The grained plates have the larger part of the market, but the market for pre-sensitized plates has been rising rapidly. The two Canadian producers of grained aluminum offset plates, Canadian Fine Color Company Limited of Toronto and Commercial Litho Plate Graining Limited of Montreal, are believed to supply most of the demand for that product, although one of them did complain about competition from imports. Minnesota Mining and Manufacturing of Canada Limited produces some sizes of pre-sensitized aluminum offset plates, but the greater part of the market in 1964 was supplied by imports.

Paper Blank Plates, or Masters - For many years paper masters have been used with mimeographing machines and spirit duplicating machines. More recently, paper offset plates, or masters, have come into extensive use as well. The greater part of the market for paper stencils and masters is believed to be supplied by imports, but some substantial quantities are also produced in Canada from imported paper stock. The table below shows imports of unfinished and finished paper and other paper blank plates.



Imports of waxed stencil paper were reported separately in 1963, when they were valued at \$822,480.

Imports of Unfinished and Finished Paper Plates, 1964

Description of Imports	Tariff	B.P.	M.F.N.	Imports
	Item			1964
				(dollars)
<u>Paper Stock</u>				
Duplicating paper, uncut	18115-1	Free	7½ p.c.)	337,657
	18120-1	Free	7½ p.c.)	
<u>Blank Plates</u>				
Duplicating machine stencils (including paper masters for offset printing)	18110-1	Free	7½ p.c.)	1,524,902
	19900-1	17½ p.c.	22½ p.c.)	
	19915-1	10 p.c.	22½ p.c.)	

Source: D.B.S. Trade of Canada

Plates for Graphotyping and Credit Cards - Blank metallic plates for graphotyping are made by Addressograph-Multigraph of Canada Limited, who supply the greater part of the market. They are used in conjunction with addressing and internal records systems. The plates themselves are of zinc or steel; frames for holding them, which are also produced by Addressograph-Multigraph, are sold separately. These goods are dutiable according to composition.

Blank plates for credit cards and similar uses, usually made of plastic or plastic and paper, have come into increasing use in recent years. They are known to be made in Canada from imported sheets, but statistics of the market are not available.

Rubber Blank Plates - There is a market estimated at \$250,000 annually for rubber blank plates used in making hand engraved printing plates. They consist of two cured rubber or rubber and plastic sheets with cloth between; one of the sheets also has a backing of cloth. This product was not produced in Canada until recently when Lion Rubber and Plastics Limited, Montreal, began production. At the time of the public hearing, however, the greater part of the market was still being supplied from abroad.

Plastic Blank Plates - A plastic plate, sold under the name "Dycril", was introduced in the Canadian market in 1960; such plates are now provided for in tariff item 66010-1 at 10 p.c. under both the B.P. and M.F.N. Tariffs. They are made by E.I. Du Pont de Nemours Company in

the United States, and are imported by Du Pont of Canada Limited, Montreal. They consist of a layer of photosensitive plastic bonded to a base. They are made into printing plates for use either on letter-press or offset printing presses, but the market for them has not been large. Du Pont made the following statement respecting its use in Canada:

"'Dycril' is not yet in extensive use in Canada. A 'Dycril' plate costs more than four times as much as a conventional zinc plate and more than five times as much as a conventional offset plate. At present price levels, therefore, the economies flowing from the use of 'Dycril' have to be technically demonstrated for each particular use." (page 823)

#### Materials for Blank Plates

The following table contains a review of the tariff treatment of some of the principal materials used in blank plates.

Tariff Treatment of  
Selected Materials Used in Blank Plates

Material	Tariff Item	B.P.	M.F.N.
Paper for paper masters (offset)	18115-1	Free	7½ p.c.
Paper for masters for spirit duplicating machines	18120-1	Free	7½ p.c.
Tissue paper for stencils	19725-1	Free	7½ p.c.
Plastic sheets for credit cards	) 35302-1	various	
		Free	3¢/lb.
Rolled aluminum sheets for offset plates)	35400-1	15 p.c.	22½ p.c.
Rolled copper sheets for engraved plates	34815-1	5 p.c.	10 p.c.
Rolled zinc sheets for offset and engraved plates	34610-1	Free	Free
Rubber	61605-1	Free	5 p.c.

While there is no record of the total value of these materials going into the manufacture of blank plates, it must be of the order of two million dollars annually; aluminum sheet, most of it produced in Canada, is probably the largest single element of material cost. It is known that in 1964 imports of paper for paper masters were valued at \$338,000. Imports of zinc sheet for offset and

engravers' plates declined from \$299,000 in 1959 to \$158,000 in 1963, probably reflecting the decline in polishing activity by the blank plate distributors.

### Other Materials

Makers of printing plates, moulds and transfers use a variety of materials other than blank plates. Some of the more important of these materials are listed in the following table.

#### Selected Materials Used by Printing Platemakers

Material	Tariff Item	B.P.	M.F.N.
Sensitized film	18700-1	Free	20 p.c.
Other photo-sensitive materials		various	
Matrix paper	20100-1	Free	Free
Plastic and rubber moulding materials and compounds		various	
Plate backing materials of aluminum, plastic, steel, cloth and other materials		various	
Copper and other metals for electro- plating		various	
Chemicals		various	

No estimate of the market for these and other materials used by makers of printing plates, moulds and transfers is available, but it would undoubtedly amount to several million dollars. One large commercial printing plate maker estimated that his purchases of blank plates were equivalent to about four per cent of his sales dollar, and other materials purchased were equivalent to about ten percent of his sales dollar. These percentages may not, however, be typical of the whole market, including such users as offices with duplicating equipment and newspaper printers. It is known that there were imports of matrix paper valued at \$545,000 in 1964. Also, imports of the one particular kind of moulding material which is specifically provided for in tariff item 66000-1 were valued at about \$11,000 in 1963.

### Type for Printing

While statistics of Canadian factory shipments of type are not available, they are estimated at between \$500,000 and one million annually. As has been indicated in an earlier section, only a very small part of the type which is cast enters into trade. Imports of type, which consist mainly of designs not available from Canadian producers, amounted to \$201,000 in 1964.

### Type Metal and Babbitt Metal

Canadian factory shipments of type metal are estimated at about \$3.5 million annually. Statistics of imports are not available, but they are believed to be negligible. In 1963, shipments of babbitt metal amounted to \$1,178,000, and imports were valued at \$21,000.

Prices of several grades of type metal in Canada, Britain and the United States were obtained. Prices in Canada range from about \$20 to about \$50 per one hundred pounds, depending upon the composition. Prices in the United States were found to be about the same as those in Canada, so that the most-favoured-nation duty of 20 p.c. was not in fact being used. Prices in Canada were, however, between five and fifteen per cent higher than those in Britain, possibly because lead is sold more cheaply in that country than in Canada. In any case, printers would not import type metal from overseas because of the necessity of returning slag for refining at frequent intervals, and the testing services provided by local suppliers.

Babbitt metal is sold in a wide range of compositions, frequently custom made according to the requirements of the user. Prices in Canada are of the order of 40 cents per pound for lead base alloys and \$2.00 per pound for tin base alloys. Prices abroad are not available from published sources, presumably because most of the trade is in specially compounded alloys.



CONSIDERATIONS RESPECTING THE PRINTING  
AND ALLIED INDUSTRIES

The printing and allied industries undoubtedly have the greatest interest in the issues before the Board; they include the printers and publishers who are the principal users of the goods under review, and the makers of printing plates who are involved primarily as producers. Some of the economic conditions under which these and other groups within the printing and allied industries operate are considered in this section.

Printers and Publishers

The goods produced by the printers and publishers are classified under four broad headings in the following table.

Advertising and Sales Revenue from Printed Matter,  
All Industries<sup>(a)</sup>

Goods	1951	1955	1962	1963
	(thousands of dollars)			
Commercial printing	175,360	232,003	388,899	409,139
Newspapers	149,480	215,711	306,718	312,922
Magazines and other periodicals <sup>(b)</sup>	40,292	56,642	71,782	72,696
Books (fiction, non-fiction, etc.)	12,804	19,532	25,790	27,422
Total	377,936	523,888	793,189	822,179

(a) Adjusted to avoid double counting

(b) Excludes telephone and city directories, almanacs, year books, etc; these are included with commercial printed matter

Source: D.B.S. Cat. Nos. 36-203, 36-209, 36-212 and The Printing Trades 1951 and 1955

Employment in printing and publishing amounted to about 71,000 persons in 1963, about 22 per cent higher than in 1951; in comparison, employment in all manufacturing only rose by about eight per cent over the same period. Thus, taken as a group, the printing and publishing industries have been among the more rapidly growing Canadian manufacturing industries in terms of employment. Moreover, as the preceding table indicates, all sectors of printing and publishing have shared in this growth. The different sectors of printing and publishing are considered separately below.

Commercial Printing

Commercial printing is a growing and fairly profitable activity in Canada. Increasing population was cited by a spokesman for the Graphic Arts Industries Association (G.A.I.A.) as one factor which

has favoured the growth of commercial printing. Other factors which were cited were:

"The tremendous upsurge in printed packaging and printed novelties, the rapid growth in popularity of colour, the new and diverse uses of business forms, and the demand for point-of-sale displays..." (page 47)

Financial data pertaining to the commercial printers are contained in Appendix D. Profits after income tax as a percentage of net worth realized by corporations engaged in commercial printing averaged 7.6 per cent of net worth in the years 1961 to 1963 inclusive, fractionally lower than those of all manufacturing corporations; it may well be that the results achieved by very small firms not included in the statistics were less favourable. In an industry such as this composed of many firms, domestic competition tends to limit profits.

Recorded imports of commercial printed matter have not been large in relation to Canadian production. In 1963 the value of such imports amounted to about \$27 million, or to about six per cent of the value of the market. The spokesman for G.A.I.A. said that imports of printed matter were in fact far larger than the statistics indicate, and this is undoubtedly true. There is, for example, direct mail advertising which enters Canada without being recorded in the import statistics. The same applies to printed matter which is imported in conjunction with imports of other goods; wrappings and printed instructions are cases in point.

Most of the imports of commercial printed matter consist of goods which have also been produced for use in the country of origin. This applies, for example, to advertising literature, business forms and greeting cards. In many such instances Canadian requirements are only one tenth or less those in the U.S.A., and the preparatory costs, including the costs of printing plates, make it uneconomic to have the printing done in Canada. Moreover, as the spokesman for the printers pointed out, the increasing popularity of multi-colour printing has added considerably to the preparatory costs. The cost of printing plates for a multi-colour job was said to amount to between \$1,500 and \$2,000. A spokesman for G.A.I.A. said:

"Press runs for Canadian requirements ordinarily being one tenth or less, sometimes only one fifteenth, of comparable runs for the U.S. requirements, there may well be a spread of 25% or 50% or 100% or more between the unit (per item) cost of a Canadian press run and a U.S. press run.

"In these circumstances, when a parent U.S. company has prepared and produced a package wrap or an advertising brochure for a product which an associated company also sells in Canada, the associated company will normally find it much cheaper to take its designs and its printing (or, at least, its preparatory work in the form of plates or film) from the parent organization." (page 30)

On the other hand, virtually all the commercial printed matter designed specially for Canadian use is produced in Canada, and that is why imports are small in relation to Canadian production; on



strictly Canadian work, foreign competition does not appear to be a significant factor. One reason for this is to be found in the Canadian Tariff. While there are a number of tariff items providing free entry of printed matter, most of the output of the commercial printers is protected at quite high levels. Tariff items 17800-1, 17900-1, 18100-1 and 18105-1 all provide most-favoured-nation rates in excess of 20 p.c., and substantial British preferential rates as well. In 1963, duties collected as a per cent of the total value of imports of printed matter excluding newspapers, magazines and books, averaged about 7 p.c. ad valorem under the B.P. Tariff and about 19 p.c. ad valorem under the M.F.N. Tariff.<sup>(1)</sup>

Wages in the printing industry were said by the spokesman for G.A.I.A. to be about 25 per cent lower in Canada than in the United States. With factory wages representing about 23 per cent of operating expenses, he estimated the wage differential meant an advantage equivalent to about seven per cent of total operating expenses.

He also pointed out a number of other advantages enjoyed by Canadian printers. He said:

"Perhaps the first and foremost help is the need of customers for quick, fast service. With the common need for careful and repeated checking of proofs and plates, customers ordinarily want and need printers who are reasonably near at hand. As a result, nearly every community needs a local or neighbourhood printer (whether he operates profitably or not)." (page 45)

However, he laid the greatest emphasis on certain disadvantages faced by Canadian printers. He said that the "greatest barrier" to success in Canadian printing was the Customs Tariff. A good deal of the machinery used by printers is duty-free under tariff item 41205-1. However, most printing presses used by commercial printers, although duty-free under the British Preferential Tariff, are dutiable at 10 p.c., M.F.N. under tariff items 41210-1 and 41220-1. As has already been indicated, nearly all printing presses are imported, mainly from countries entitled to the Most-Favoured-Nation Tariff. The spokesman for G.A.I.A. also listed a number of other tariff items providing for duties as high as 22½ p.c. M.F.N., on goods used by the commercial printers. He estimated that the duties, combined with other aspects of the Canadian tax structure, raised the cost of machinery to about one-third over the level in the United States.

Another factor upon which the printers laid considerable emphasis was the proclivity of many organizations to do more of their own printing rather than having it done by commercial printers. While statistics are not available, there seems little doubt that there is such a trend. The introduction of a wide variety of small and highly automatic duplicating machines and small printing presses has undoubtedly encouraged organizations to do some of their own printing, specially where relatively short runs are involved and where the highest

---

(1) Details of these imports are contained in Appendix C

quality is not required. In addition, some organizations whose requirements of printed matter are large have their own full scale printing establishments.

### Newspapers

The newspaper business, like commercial printing, has been growing rapidly, revenues having doubled between 1951 and 1963.

#### Revenues from Advertising, Subscriptions and Sales of Newspapers

	1951	1955	1962	1963
	(millions of dollars)			
Daily	118.5	170.8	248.8	255.1
National weekend	13.1	20.9	26.3	26.5
Weekly, semi-weekly, tri-weekly, etc.	17.3	23.2	30.8	30.6
Controlled distribution weekly	0.6	0.9	0.8	0.7
Total	149.5	215.8	306.7	312.9

Source: D.B.S. Cat. Nos. 36-203, 36-212 and The Printing Trades 1951 and 1955

Financial data pertaining to companies engaged in printing and publishing, most of them being newspaper publishers, are presented in Appendix D. Profits after income tax as a percentage of net worth averaged 12.3 per cent in the three years 1961 to 1963 inclusive, undoubtedly reflecting the profitability of the daily newspapers; the weeklies, judging from the submission of the Canadian Weekly Newspapers Association, have not been as profitable, although they have shared in the growth of the industry. A spokesman for the Canadian Weekly Newspapers Association said:

"Today in Canada, there are many, many weekly newspapers whose gross earnings when compared with operating costs and the value of necessary equipment installed, present such an unattractive picture as to be unsaleable as a going business. The net earnings simply do not equal a reasonable return for the investment." (page 382)

The newspaper publishers are unprotected from external competition in the sense that newspapers can be imported free of duty. However, with their close ties to the communities they serve, they do not in fact face import competition. A resident in a particular community will rarely subscribe to a newspaper published abroad instead of the local paper, although he may subscribe to both.

Newspaper publishers must, however, compete with other media for advertising, which is their principal source of revenue. They are in a strong position to compete for local advertising, which accounts



for the greater part of their advertising revenue; they are less strongly placed to compete for national advertising. A spokesman for the weeklies described some of their difficulties in competing for advertising. He said:

"The community weekly newspapers in Canada are today facing extremely critical, and in some cases overwhelming economic problems. Constantly increasing labour costs in our own industry, to which is being added the burden of ever-increasing prices of materials are only one side of the difficult position which this medium faces. Another major threat to survival is the extreme competition for advertising posed by other communication media. This competitive climate imposes tight restrictions on the extent to which the weekly newspaper can increase its dollar earnings through advertising and subscription sales, and so we have the situation of mounting costs pressing against limited gross earnings. A constantly shrinking net earnings and reserve for plant maintenance and new equipment purchases is the result." (page 382)

The dailies, as already indicated, have been quite successful, although their spokesman pointed out the extremely high mortality rate in recent years among firms attempting to enter the field.

Most of the goods entering into the production of newspapers are duty-free. This applies to printing presses, the wide range of machinery and apparatus covered by tariff items 41205-1, and 41215-1 and to newsprint. While some goods entering into the production of newspapers are dutiable, this fact does not appear to constitute a serious disability for the newspapers, and the spokesman for the dailies did not make any assertion to the contrary.

#### Magazines and Other Periodicals

The serious problems faced by the periodicals press in Canada, especially by the publishers of magazines of general circulation, have been public knowledge for some time; the vital role played by Canadian magazines, and the grave difficulties they face, are described in the Report of The Royal Commission on Publications. While the revenues of trade, technical, professional and financial publications have increased rapidly since 1951, those of the magazines of general circulation have not kept pace with the general growth of newspaper and other periodical publishing. Moreover, imports of magazines are far larger than Canadian production.

Duties on the goods which they use are not, however, a serious disability to the magazine publishers. Through special tariff items and drawback provisions, they can import most of their requirements duty-free or at low rates.

Revenue from Advertising, Subscriptions or Sales  
of Canadian Periodicals

	<u>1951</u>	<u>1955</u>	<u>1962</u>	<u>1963</u>
	(thousands of dollars)			
Magazines of general circulation	15,060	21,709	25,489	25,442
Trade, technical, professional and financial publications	13,296	19,188	30,114	30,494
Agricultural publications	4,766	5,752	6,509	6,559
Religious publications	3,435	4,958	4,427	4,384
School and collegiate publications	679	1,358	1,212	1,182
Juvenile publications	..	512	326	508
Fraternal publications	293	635	730	804
Other	<u>2,763</u>	<u>2,530</u>	<u>2,975</u>	<u>3,323</u>
Total	40,292	56,642	71,782	72,696

Source: D.B.S. Cat. Nos. 36-203, 36-212 and The Printing Trades  
1951 and 1955

### Books

Canadian book publishers concentrate heavily on the production of books for educational purposes and other cultural pursuits; they also do some reprinting of books originally published elsewhere. Revenue from the sale of books printed in Canada amounted to \$13 million in 1951 and \$27 million in 1963. Imports of books, including pamphlets, have consistently been considerably larger than Canadian production. Following are the details of imports in 1964:

Imports of Books, Including Pamphlets, 1964

Description	Imports, 1964 (\$'000)
Religious books and pamphlets	4,667
Books and pamphlets printed or published by any government abroad, or by the United Nations or N.A.T.O.	234
Dictionaries, encyclopedias and atlases	4,792
Books for use as textbooks or works of reference, n.e.s.	7,905
Books for libraries, n.e.s.	2,034
Books and pamphlets, n.e.s. in any other language than the English language	3,726
Novels and works of fiction, n.e.s.	6,577
Books and pamphlets, n.e.s.	<u>25,718</u>
Total	55,653

Source: Appendix C



The competitive advantages enjoyed by producers of books in Canada are few, and their disadvantages are heavy. One advantage is the fact that wage rates are somewhat lower in Canada than in the United States, although they are higher than in most other countries. Another advantage in the Canadian market is a most-favoured-nation duty of 10 p.c. on books of general interest such as works of fiction, except when for specified users enjoying free entry. This duty undoubtedly assists Canadian printers in obtaining the business of printing the Canadian requirements of some books originally published abroad.

Many books, however, can be imported duty-free. This applies to all books in other than the English language, all books imported under the British Preferential Tariff, virtually all scholarly works of reference, religious books, most books on the curricula of schools, colleges and universities, books for libraries, and certain other classes of books as well.

While printers of books enjoy tariff concessions on some of the materials they use, they are still subject to payment of duties on many others, if imported. For example, they are subject to most-favoured-nation rates of 10 p.c. on their printing presses, 20 or 22½ p.c. on much of their paper and 15 p.c. on their ink.

Perhaps the greatest handicap of Canadian book producers lies in Canada's links with the English and French speaking countries of the world. With a relatively small home market, it is frequently uneconomic for the Canadian requirements of books published abroad to be printed in Canada. The Bible was cited as a case in point by G.A.I.A.; except during World War II, the Board was informed that the Bible has not been printed in Canada.

Reference was also made to certain features of United States law which have prevented Canadian printers from printing books of United States authorship and exporting them in volume to the United States.

### Makers of Printing Plates

The market for the products of the printing plate makers has already been considered in an earlier section of this Report. Production has been rising year by year along with increases in output of printed matter. Imports have consisted mainly of printing plates, moulds and transfers of images created primarily for use in the country of origin. Such imports would include images for books already printed abroad, or for advertisements for use in foreign as well as Canadian media. There are, of course, exceptions, but it would appear that nearly all printing plates destined purely for Canadian printing are made in Canada.

Financial data pertaining to the engraving, stereotyping and allied industries are contained in Appendix D. Profits as a percentage of net worth of these industries have been consistently higher than the average for all manufacturing; in 1963 they were equivalent to 10.7 per cent of net worth compared with 8.8 per cent for all manufacturing. This is a particularly favourable record for an industry composed of small firms.

The degree of protection now enjoyed by the printing plate makers is difficult to gauge because of the variety of forms in which an image can be imported. Most engravings and transfers are dutiable under tariff item 47200-1 or 47300-1 at a most-favoured-nation rate of 15 p.c.; those for periodicals, certain books and music are duty-free. However, there would be nothing to prevent one from having an engraving made abroad and importing a mould of it under tariff items 47400-1, 47500-1 or 47510-1, with duties of one cent per square inch or less; the total duties paid in this way would often be less than those payable on the original printing plate.

Offset printing plates in two or more colours, other than those specified in end-use items, are entered under tariff item 47300-1, duty-free under the B.P. Tariff and at 15 p.c. under the M.F.N. Tariff. Most other offset printing plates are dutiable according to composition; those of aluminum are dutiable under tariff item 35400-1 at 15 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N.

The B.P. and M.F.N. duties of one cent per square inch on matrices for advertisements and certain other printed matter under tariff item 47400-1 are of considerable interest to those who produce large numbers of matrices. Matrices are sold under a number of different arrangements, but where other services are not included in the price they are sold at prices ranging upwards from about one cent per square inch. The Board was told that, without a duty, the matrices of syndicated features distributed to newspapers and others would probably be produced in the United States instead of in Canada as at present. Moreover, it was pointed out that the schedule of prices to newspapers and others for the syndicated services is the same in Canada as in the United States, and it was said that the removal of the duty would not be followed by any change in this price relationship.

About the only disadvantage facing Canadian printing plate makers in competing for original Canadian work is that many of the raw materials they use are dutiable when imported. An official of a large printing plate maker estimated that this protection on materials might average 20 p.c. ad valorem. However, he said that materials only constituted between 11 and 18 per cent of the selling value of the final product, depending upon the particular product involved. One large printing plate maker reported that the total cost of supplies purchased in a recent year had been equivalent to 12 per cent of sales. Thus, protection accorded materials for printing plates would be equivalent to two or three per cent of the value of sales.

Labour costs, which are equivalent to about 60 per cent of the value of sales, are substantially lower than in the United States.

Another advantage of considerable importance which the Canadian printing plate makers enjoy is proximity to the market. Daily and even hourly liaison with clients is important for this industry. Indeed, it is so important that printing plate makers and their principal customers are often located in the same section of a city; and some printing plate makers actually have branch plants on the premises of large customers.



It appears that these two factors - lower wage rates and the advantage of being located near the customer - give the Canadian plate makers a decided advantage over printing plate makers in the United States in competing for purely Canadian business.

### Producers of Blank Plates

The producers of the various kinds of blank plates are to be found in a number of different industries, and their output is not included with that of the printing and allied industries in official statistics. In terms of value a large proportion of Canadian production of blank plates consists of metallic engravers' plates and grained aluminum offset plates.

The material most commonly used in producing engravers' plates is zinc. The zinc sheet in the required quality is not made in Canada, and it is imported duty-free, mostly from the United States, under tariff item 34610-1. After zinc sheets have been ground and polished they are dutiable under tariff item 47200-1, 10 p.c., B.P. and 15 p.c., M.F.N. Until about five years ago, W.E. Booth Limited and Latimer Limited supplied most of the Canadian market by grinding and polishing imported sheets, but at present the market is supplied largely by blank plates imported in finished form. A spokesman for Latimer Limited explained the situation in the following terms:

"About five years ago a radically new 'Powderless Etch' engraving process for zinc was introduced. This process involves complicated physical and organic etching chemistry, previously unknown to the trade. The metallurgy and finishing techniques for the new 'fine grain' zinc was also new.

"In attempting to use Canadian ground metal we learned early that our grinding and finishing process caused problems. It appeared wiser to accept U.S. production in ready to use form at the time. As this new process slowly replaced conventional etching our zinc production fell and was replaced by imported zinc." (page 656)

Booth, on the other hand, reported that it was grinding and polishing plates for use with the new process.

The spokesman for Latimer expressed interest in acquiring modern polishing and grinding equipment if he was assured of continuing tariff protection on these operations. It is understood that in the United States the polishing is now done at the rolling mill rather than by distributors. The spokesman for Latimer Limited said that the cost of the imported zinc sheet was equivalent to about 60 per cent of the price he charged for the plate after polishing; he pointed out, however, that the zinc in the imported sheet was actually of Canadian origin.

Grained aluminum offset blank plates are dutiable under tariff item 35400-1 at 15 p.c., B.P. and 22½ p.c., M.F.N. The aluminum sheets from which they are made are made under tariff item 35302-1, duty-free under the B.P. Tariff and with a specific duty of three cents per pound under the Most-Favoured-Nation Tariff; this

latter duty amounts to about 5 p.c. ad valorem. Despite the high level of effective protection which these rates provide for the grain-ing operation, an official of one of the two Canadian grainers, Canadian Fine Color Company Limited, complained of severe competitive pressure even under existing tariff arrangements. The pressure appears to come partly from imports and the threat of imports of grained aluminum plates from the United States, and partly from other kinds of plates of Canadian and foreign origin.

He explained that the Canadian grainers had been in a stronger position some years previously when most grained plates were of zinc, because the zinc plates are returnable after use whereas the aluminum plates are not. He indicated that plate grainers in the United States operated on a much larger scale than those in Canada, giving them advantages both in the purchase of materials and in the organization of production.

The grainers must, in addition, compete with other products. There are, for example, pre-sensitized aluminum plates, such as those produced in a few sizes by Minnesota Mining and Manufacturing of Canada Limited; other sizes are imported. Grained aluminum plates must also meet the competition from printing plates of paper and plastic.



## THE PRINCIPAL REPRESENTATIONS

### The Commercial Printers

The commercial printers were represented by the Graphic Arts Industries Association (G.A.I.A.). The membership of the Association extends well beyond the commercial printing industry, and includes producers of type, printing plates and related products, newspapers, periodicals, books and many paper products. However, while many of these other interests supported G.A.I.A., they also made their own representations, and the spokesman for G.A.I.A. emphasized that he was primarily concerned with the commercial printers.

The proposals made by G.A.I.A. would involve reductions in the duties now payable by printers on imports of machinery and process supplies. However, the scope for such reductions is limited by the fact that many of the goods under review are now duty-free.

With regard to machinery and equipment, G.A.I.A. proposed an extension of the range of goods now covered by the tariff items under review, with duty-free entry under all Tariffs when of a class or kind not made in Canada and rates of Free, B.P. and  $7\frac{1}{2}$  p.c., M.F.N. when of a class or kind made in Canada. Most of the goods involved would be deemed of a class or kind not made in Canada. One of the principal effects of the proposal would be a removal of the most-favoured-nation rate of 10 p.c. on printing presses covered by tariff items 41210-1 and 41220-1. Imports of printing presses under these two items were valued at \$14.7 million in 1963, and duties paid amounted to \$1.3 million. The proposals regarding other machinery and equipment would involve both increases and decreases in duties, and it is doubtful that the net effect would be very large. The goods which are now duty-free under tariff item 41205-1 would become subject to a most-favoured-nation duty of  $7\frac{1}{2}$  p.c. when of a class or kind made in Canada; on the other hand, there would be reductions in duties on machinery and equipment which would be attracted from other tariff items of more general application.

In addition to its proposals respecting rates and the enumeration of goods, G.A.I.A. proposed the following end-use provisions:

"when for use exclusively by and in their capacities as commercial printers, publishers, lithographers, typesetters, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, but not for use by firms or organizations which are only incidentally engaged in printing, and paper, film, plastic or foil converters, or by manufacturers of articles made from paper, cardboard, film, plastic or foil."

One effect of this provision would be to exclude those "only incidentally engaged in printing" from importing their requirements of machinery and equipment under the same conditions proposed for the commercial printers and other groups favoured by G.A.I.A. Not unexpectedly, the impractical and inequitable aspects of this proposal were brought to the attention of the Board by others at the public hearing. Another effect of the proposed end-use provision would be to extend the scope of existing tariff item 41205-1 to include manufacturers of articles made from film or plastic.

With regard to printing plates, moulds and transfers, G.A.I.A. proposed that the scope of the existing duty-free end-use items be broadened. It also proposed that all other printing plates, moulds and transfers be brought together in a single item with rates of Free, B.P. and 15 p.c., M.F.N. This latter proposal would mean the removal of the B.P. rate of 10 p.c. on printing plates now entered under tariff item 47200-1, and it would attract printing plates of paper, rubber, plastic, aluminum and certain other materials which are now dutiable at various rates, mainly under tariff items of more general application. The net effect would be some reduction in rates, although the amount of trade affected would not be large.

The principal argument advanced by G.A.I.A. in support of its proposals was one of need. The spokesman for the Association stated:

"...successive governments have saddled the industry with one economic burden after another without studying or reckoning with the grave consequences for the industry and for Canada.

"...We have paid a very heavy price for our collective neglect, and hope that the Government and Parliament may be induced to reduce the damage being done to the nation's economy and to some of its higher interests." (pages 13-14)

He also laid considerable emphasis upon the many technological changes in printing which had occurred in the past twenty or thirty years, and upon the lack of production in Canada of machinery for the industry; many of the details of the proposals of G.A.I.A. were designed to take these factors into account. He stressed the importance to the commercial printers of the proposed removal of the most-favoured-nation duty of 10 p.c. under tariff items 41210-1 and 41220-1 on printing presses of a class or kind not made in Canada. Such printing presses when for printing newspapers, periodicals or telephone directories are already duty-free under tariff item 41200-1. The spokesman for G.A.I.A. pointed out that many producers of newspapers, periodicals and telephone directories are also commercial printers and, as such, they compete directly with other commercial printers who have to pay duties on their printing presses.

The Institute of Business Form Manufacturers supported the proposals of G.A.I.A., although it proposed that the machinery and equipment should be duty-free even when of a class or kind made in Canada.

#### Other Printers and Publishers

The daily newspaper publishers, the weekly newspaper publishers, the periodical press and the book manufacturers all made their views known to the Board.

The Canadian Daily Newspaper Publishers Association proposed, in effect, that all machinery, equipment, printing plates and materials entering into the cost of printing plates be duty-free when for newspapers. The Canadian Weekly Newspapers Association proposed that "the tariffs on all materials required in the printing processes, be they consumed or employed, should be removed".



Most of the machinery and equipment used in producing newspapers is now duty-free. The spokesman for the daily newspapers said that the major effect of the proposal respecting machinery, equipment and apparatus would be to attract equipment which was not known when the existing end-use items were established; he indicated that the proposal was also intended to facilitate the acquisition by newspapers of new kinds of equipment which might be developed in the future. He said:

"The newspaper publishing business is, along with many other industries, experiencing technological change and innovation at an accelerating pace. Accordingly any attempt to draft a tariff item in specific terms to cover current technology would almost certainly be out of date within a short term of years. It is our conviction, therefore, that a tariff item which is to remain effective for the purposes intended over a reasonable period of time must perforce be drafted in general terms." (page 351)

He expressed the view that since newspapers are imported free of duty, printing plates and materials therefor when for newspapers should also be duty-free. In addition, he contended that there were reasons for considering the case of the newspapers separately from that of the commercial printers. Aside from the fact that commercial printers enjoy tariff protection, he pointed to the important role played by newspapers in Canadian life. He said:

"We are convinced most Canadians would take the view that healthy, vigorous newspapers are an indispensable element in the fabric of Canadian life. We believe most Canadians would support the proposition that Canadian newspapers should be encouraged by every reasonable means.

"We believe also that most Canadians would agree with the Royal Commission on Publications when it said: 'The view of the Commission is that in an area as vital and sensitive as that of the Press, whatever is done should be positive rather than negative, with the goal the promotion of the Canadian periodical, not the suppression of the foreign.'

"In the context of Reference 133 it would seem to this Association that the publication of newspapers in Canada should be assisted by the positive means of lowering production costs rather than by the negative one of seeking to restrict the circulation of foreign newspapers or periodicals in Canada." (page 350)

The point of view of the daily newspaper publishers was further illustrated by the reaction of their spokesman to a proposal by machinery manufacturers for a duty. He said:

"In this connection we have no hesitation in saying the promotion of such manufacture at the expense of newspaper publishers would run counter to manifest public policy and would be contrary to the public interest. We contend that the existence of such tariff items as (41205-1) together with the policy of government with respect to mail rates

on publications to subscribers who are dependent on the mails for delivery of news publications - indicates a public concern for the economic availability of newspapers published in Canada which surely takes precedence over the anxiety of machinery manufacturers to be enriched at our expense. Their proposal, so far as it relates to machinery and equipment for publishing newspapers, runs directly counter to established public policy. Ours is a logical extension of this policy having regard for latter day technology." (page 354)

The Canadian Book Manufacturers Institute and the Periodical Press Association supported the proposals of G.A.I.A..

### The Manufacturers of Paper Products

The Canadian Paper Box Manufacturers Association Incorporated supported some of the proposals of G.A.I.A. In particular, it supported the proposal that the goods specified in tariff item 41205-1 should continue to be duty-free when of a class or kind not made in Canada, and that those covered by tariff items 41210-1 and 41220-1 should be made duty-free when of a class or kind not made in Canada. However, the paper box manufacturers allied themselves more closely with the brief of the Canadian Pulp and Paper Association, a discussion of which follows.

The Canadian Pulp and Paper Association spoke for those members which "print and/or convert raw stock for, or actually manufacture, corrugated containers, boxes, bags, cartons, fine papers, tissue and sanitary products, and a wide variety of miscellaneous supplies both for household and industrial use". In point of fact, most members of the Association are so engaged, and they account for a large proportion of total Canadian output of converted paper products. As indicated in an earlier section of this Report, while the paper converters do benefit from some of the provisions of the tariff items under review, a much larger proportion of the machinery and equipment they require is provided for elsewhere in the Customs Tariff than in the case of the printing and allied industries.

The Association submitted a number of proposals which would mean maintenance, or in some cases removal, of the duties provided by the tariff items under review. In addition, the Association proposed that "tariff item 41205-1 be extended to include machinery and equipment widely used in the converting industry". The list of machinery and equipment which the Association had in mind is reproduced in a subsequent section of this Report; <sup>(1)</sup> it would represent a far greater extension of the scope of the tariff items under review than was envisaged in the proposals of any other group.

### Manufacturers of Machinery and Apparatus

Most of the machinery and equipment under review is imported, and there were not many representations from Canadian producers. Ashton Press Manufacturing Company Limited, the Canadian Electrical

<sup>(1)</sup> See page 79



Manufacturers Association and the Machinery and Equipment Manufacturers' Association of Canada were among those represented at the public hearing. There were also a few other representations from individual manufacturers, the details of whose interests are reported in the next part of this Report.

Ashton Press, as indicated earlier, accounts for a large part of the Canadian output of printing presses. Its presses, which are designed for use in the production of manifold business forms, are covered by tariff item 41220-1, with rates of Free, B.P. and 10 p.c., M.F.N. In addition, the company produces a considerable amount of ancilliary equipment some of which is covered by tariff item 41205-1, duty-free under both the B.P. and M.F.N. Tariffs. The company sought maintenance of the 10 p.c. most-favoured-nation rate of protection on their printing presses, and the establishment of a similar rate on their ancilliary equipment. It proposed that this be accomplished by the establishment of a separate tariff item to cover just the equipment in which it was interested, allowing the rates on other machinery and equipment under review to be decided upon independently.

In support of the proposals, the spokesman for the company said:

"Having examined the level of tariff applicable to the great bulk of machinery of a class or kind made in Canada, our proposal seems very modest.

"The Ashton Press Manufacturing Company Limited is a highly efficient manufacturer and is entirely capable of competing on level terms with its United States competitors. We do not seek a high level of protection and would, indeed, prefer that manifold business forms machinery be duty-free into both Canada and the United States. It seems unreasonable to us, however, that United States manufacturers should have a free run at the small Canadian market for collating equipment whilst we must surmount a tariff of  $11\frac{1}{2}\%$  when selling the same equipment to the United States." (page 571)

The Canadian Electrical Manufacturers Association opposed any additions to the tariff items under review which would attract electrical apparatus, contending that some of the proposals of G.A.I.A. would have that effect. Most electrical apparatus is now provided for in a series of items beginning with tariff item 44500-1; much of it is dutiable at 15 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N. The electrical manufacturers favoured as much specificity as possible in the wording of tariff items, and the avoidance of such words as "apparatus" or "equipment". They proposed that the words "machinery and apparatus" and "machines and apparatus" in tariff item 41205-1 be replaced by the phrase "machinery, n.o.p."

They also expressed opposition to the proposals by G.A.I.A. that goods of a class or kind made in Canada should be dutiable at Free, B.P. and  $7\frac{1}{2}$  p.c., M.F.N., and that goods of a class or kind not made in Canada should be duty-free. Instead, they proposed rates of 10 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N. on goods of a class or kind made in Canada, and Free, B.P. and  $7\frac{1}{2}$  p.c., M.F.N. on goods of a class or kind not made in Canada. The spokesman for the electrical manufacturers said:

"We believe there should be rates on not-made-in Canada goods because we think this holds open the door to future Canadian manufacture, to future employment, to the creation of new customers for the printing industry and others; we believe that an industry which appears to be as profitable as the Canadian printing industry and publishing industry can well afford to pay nominal rates of duty on goods which are not made in Canada." (page 538)

The Machinery and Equipment Manufacturers' Association of Canada, in addition to expressing particular interest in machines for slitting or rewinding, expressed a general interest in ensuring protection on goods which Canadian manufacturers were capable of manufacturing. While the Association did not express an interest in printing presses, it took the stand that other machinery and apparatus under review should be dutiable at 10 p.c., B.P. and 22½ p.c., M.F.N., when of a class or kind made in Canada. The spokesman for the Association expressed concern over the number of end-use items in the Customs Tariff. He said:

"If it is not practical at this time to eliminate all of the 'end-use' items in the Customs Tariff, at least they should be reviewed and examined. The onus should be on the industries benefitting from these items to establish the extent to which their competitive position would be adversely affected if there were any changes in these items, and keeping in mind that the domestic manufacturers should be entitled to some protection in respect of such machinery, apparatus, appliances and equipment as is available in Canada." (page 476)

The Printing Plate Makers - Only a few of the two hundred or so commercial producers of printing plates were represented at the public hearing. Many of these firms are members of G.A.I.A., but that Association was concerned primarily with the interests of the commercial printers.

Two of the largest printing plate makers in Canada, as well as a firm specializing in gravure printing cylinders, did make representations. The large firms are heavily dependent upon national advertisers as a source of revenue, and may well be more sensitive to competition from imports than are printing plate makers who derive their revenues mainly from local business. They proposed higher and uniform duties on printing plates. They opposed the proposals of G.A.I.A. which would involve lower duties as well as an extension of the scope of the existing end-use items under which printing plates for specified purposes are duty-free. They were critical of existing tariff arrangements under which printing plates of different materials attract different rates of duty.

#### Producers of Materials for Printing Plates

Representations were made by only a few of the interests involved. For example there were no representations from producers of aluminum sheeting or copper sheeting, or from manufacturers of paper blank plates. Representations were confined mainly to certain groups which grain, polish or otherwise finish blank sheets and plates for



use by printing plate makers. They expressed considerable concern over the differences in present tariff treatment of blank plates, which are now classified largely according to material; they sought a single tariff item with rates of 15 p.c., B.P. and 20 p.c., M.F.N. to provide for blank plates of all materials; some increases and some reduction in existing duties would result. G.A.I.A. also favoured uniform treatment, but at lower rates than those favoured by the manufacturers of blank plates.

#### Other Representations

The Association of British Manufacturers of Printers' Machinery and the Association of Manufacturers and Suppliers for the Graphic Arts, Britain, on behalf of British manufacturers, proposed that the margins of preference they now enjoy under the tariff items in the Reference be maintained.



## THE PROPOSALS IN DETAIL

Reference has been made in the preceding section of this Report to the principal proposals made to the Board and of the impact which their implementation might have. The following pages contain a more or less complete catalogue of all the proposals which were made. Many of the proposals, while of interest to those concerned, would have only minor economic effects which, in many instances, could not be anticipated with any precision.

### Printing Presses and Parts

#### Graphic Arts Industries Association

The proposals of G.A.I.A. respecting printing presses are shown alongside existing items in the table on the following pages. It will be noted that the term "printing presses" is not used; instead, various processes which are now or may in future be used for printing are specified. Also, typesetting and related processes are specified in the proposed item, but they are not under discussion at this point.

The spokesman for the Association in explaining the relation of the proposed wording to technological change, said:

"...we are entering an [era] where we may have to radiate an image and project it, so that the use of the words 'printing press' may be too restrictive; so we have said 'machinery, apparatus or equipment' and so on '...for the operation of such machinery or equipment, or otherwise reproducing images...'. After all, you must understand that we are dealing with an image, and how it may be reproduced in the future we don't know. If you look ahead 50 years, or even 20 years, or even ten years, we may well be into all these things." (page 79)

A member of G.A.I.A. explained some of the proposed wording in the following terms:

"Some of the other processes mentioned here are not existing commercially at the present time. Electrostatic printing has arrived, but not generally yet commercially.

"The reason for some of the other terms, I believe, from the Committee's viewpoint, was to try and provide for some current techniques and processes that are just becoming known and possibly might be adapted in other ways, and this is the point they are trying to make - that some of these things, such as chemical or photochemical and photolithography (sic) printing and so on are likely to be adaptations to the printing industry of various discoveries that are being made and that are likely to be made...

"...the electrostatic principle is well known. As a matter of fact, the ordinary Xerox copier operates on the electrostatic principle. The electrostatic printing press - machine -



Graphic Arts Industries Association  
Proposal Respecting Printing Presses

<u>Existing Tariff Items</u>		<u>Proposed Tariff Item</u>	
<u>Tariff Item</u>	<u>B.P.</u> <u>M.F.N.</u>	<u>Imports</u> <u>1963</u> <u>\$,000</u>	<u>B.P.</u> <u>M.F.N.</u>
41200-1 (in part) Printing presses, of a class or kind not made in Canada, for use in the printing of newspapers, telephone directories or periodical publications which, if imported, would qualify for entry under tariff item 18405-1, and parts thereof, not to include saws, knives and motive power;.....	Free	Free	Machinery, apparatus or equipment of all kinds and processes, e.g., mechanical, chemical, photochemical, electrical, photoelectrical, electrostatic, electronic, photoelectronic, electrolytic, photolytic, vacuum forming, or radiant, for the purpose of printing, typesetting, including photo-typesetting, teletypesetting, tape perforating, typecasting, type justifying, and computerization for the operation of such machinery or equipment, or otherwise reproducing images of a permanent or semi-permanent nature by such means;...when for use exclusively by and in their capacities as commercial printers, publishers, lithographers, typesetters, bookbinders, manufacturers of stereotypes, electrotypes, and printing plates or rolls, but not for use by firms or organizations which are only incidentally engaged in printing, and paper, film, plastic, or foil converters, or by manufacturers of
41210-1 (in part) Flat bed cylinder printing presses, to print sheets of a size 25 by 38 inches or larger, and complete parts thereof;.....	Free	7,601	41
41220-1 (in part) Offset presses; lithographic presses; printing presses..... n.o.p.; complete parts of the foregoing, not to include saws, knives and motive power.	Free	10 p.c.	14,624

Graphic Arts Industries Association  
Proposal Respecting Printing Presses (Cont'd)

Existing Tariff Items

Proposed Tariff Item

<u>Tariff</u> <u>Item</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>Imports</u> <u>1963</u> <u>\$'000</u>	<u>B.P.</u>	<u>M.F.N.</u>
			articles made from paper, cardboard, film, plastic or foil,		
			(1) when of a class or kind not made in Canada; parts thereof, not to include motive power.....	Free	Free
			(2) when of a class or kind made in Canada; parts thereof, not to include motive power.....	Free	7½ p.c.

has been specifically devised for printing on irregular surfaces, or irregular paper for jobs where it is not practical to print by contact; but by the electrostatic method it can be done; and a machine has been specifically devised for that purpose." (pages 247 and 248)

At the present time, however, virtually all commercial printing is carried out on printing presses within the meaning of existing tariff items 41200-1, 41210-1 and 41220-1. A few printers have acquired photocopying equipment which is entered duty-free under tariff item 46240-1.

Some of the adjectives in the proposal were apparently intended to apply to things other than for printing. For example, the Board was told that the term "photoelectrical" was to take account of optical character recognition apparatus, for use in connection with typesetting, which is under development. And the word "photoelectronic" was inserted with scanners in mind; these are used by printing plate makers and are now entered duty-free under tariff item 41205-1.

The proposal respecting rates on printing presses seems to be of more immediate significance than the proposed changes in wording. G.A.I.A. proposed, in effect, that the most-favoured-nation duty of 10 p.c. under tariff items 41210-1 and 41220-1 be removed. This proposal was, of course, qualified by the end-use provision and by a proposed most-favoured-nation duty of  $7\frac{1}{2}$  p.c. on goods of a class or kind made in Canada.

#### Other Users

The newspaper publishers already have free entry of printing presses, and they naturally wanted this situation to be maintained. The Canadian Daily Newspaper Publishers Association proposed the creation of the following tariff item to encompass printing presses and all other machinery, apparatus and equipment for use in the production of newspapers:

Machinery, apparatus and equipment for use in the production of newspapers, including machinery, apparatus and equipment for stuffing, counting, wrapping, labelling, addressing and bundling such newspapers; parts and accessories for the foregoing

B.P.

M.F.N.

Free

Free

The Canadian Weekly Newspapers Association proposed that "the tariffs on all materials required in the printing processes, be they consumed or employed, should be removed".

The Canadian Book Manufacturers Institute, the Canadian Paper Box Manufacturers Association Incorporated and the Periodical Press Association supported the proposal of G.A.I.A. The Institute of Business Form Manufacturers, while supporting the wording proposed by G.A.I.A., sought the duty-free entry of printing presses whether or not of a class or kind made in Canada.



The Canadian Pulp and Paper Association proposed that the existing duties under tariff items 41210-1 and 41220-1 be removed.

W.R. Grace and Company of Canada Limited, Cryovac Division, Cooksville, Ontario, a manufacturer of plastic packaging materials and other products, proposed that printing presses of a class or kind not made in Canada be made duty-free regardless of end-use, and that tariff items 41210-1 and 41220-1 be deleted.

### Manufacturing Interests

Ashton Press Manufacturing Company Limited, which accounts for most of the Canadian production of printing presses, sought no change in the existing rates of duty on printing presses. However, in view of proposals made by others for removal of the most-favoured-nation rate of 10 p.c. under tariff item 41220-1, Ashton sought to protect its position by proposing the creation of a new tariff item to cover its own production. It proposed the creation of the following tariff item:

	<u>B.P.</u>	<u>M.F.N.</u>
Machinery and apparatus for use in the manufacture of manifold business forms, viz:		
(i) Rotary web fed rubber plate and offset presses including:- feed-in units, printing units, numbering units, punching units, slitting units, perfora- ting units, rewinders, folders and sheeters, and parts thereof	Free	10 p.c.

The spokesman for the company said that the manufacture of manifold business forms is an operation which is clearly distinguishable from other kinds of printing, and that the same is true of the machinery used.

The Canadian Electrical Manufacturers Association, as already indicated, sought to prevent any changes in the Tariff which would involve electrical apparatus, most of which is now dutiable at 15 p.c., B.P. and 22½ p.c., M.F.N. For this reason, the Association supported the proposal of G.A.I.A. to retain the phrase "not to include motive power". However, it expressed opposition to much of the proposed wording of G.A.I.A. as being far too general and likely to attract electrical apparatus.

### Importers

Addressograph-Multigraph of Canada Limited does a certain amount of manufacturing and assembling of small offset presses, addressograph machines and other products. The company opposed any

increases in the duties now provided in tariff item 41220-1, under which its offset presses and most addressograph machines are imported; and it proposed the establishment of a tariff item providing free entry of parts for assembly of the goods provided for in tariff item 41220-1.

In addition, the company sought lower duties on data recorders. These are machines or devices such as are used by retailers and others for transferring data from credit cards to paper. Some data recorders are now classified under tariff item 41220-1 as printing presses but others are classified as manufactures of iron or steel under tariff item 44603-1 at 10 p.c., B.P. and 22½ p.c., M.F.N. The company proposed the creation of a new tariff item as follows:

	<u>B.P.</u>	<u>M.F.N.</u>
Data recorders for imprinting from a metal, plastic or rubber plate or card	Free	10 p.c.

Dashew Business Machines (Canada) Limited, Toronto, and Farrington Business Machines (Canada) Limited, Don Mills, Ontario, two other importers of data recorders, made proposals similar in effect to that of Addressograph-Multigraph.

#### Parts of Printing Presses

American Wringer Company, Farnham, Quebec, a manufacturer of rubber replacement covers for printing press rollers, proposed the creation of the following tariff item:

	<u>B.P.</u>	<u>M.F.N.</u>
Printing press rollers or replacement covers for such rollers		
(i) of a class or kind not made in Canada	Free	Free
(ii) of a class or kind made in Canada	15 p.c.	20 p.c.

Such rollers are now dutiable as parts of printing presses under tariff items 41200-1, 41210-1 and 41220-1 at rates of Free, B.P. and either Free or 10 p.c., M.F.N.

Lion Rubber and Plastics Limited, Montreal, another manufacturer of rubber and plastic replacement covers, supported the proposal of American Wringer.

The proposal was opposed by the Canadian Daily Newspaper Publishers Association, the spokesman for whom said that the re-covering of some printing press rollers had not been done successfully in Canada. The G.A.I.A. supported the position taken by the newspaper publishers.



The Rubber Association of Canada, on behalf of the Miner Rubber Company Limited, made a proposal respecting offset press blankets and blanketing. The Association proposed that tariff item 53415-1 be amended to provide for goods of a class or kind made in Canada. The item, as amended, would be:

	<u>B.P.</u>	<u>M.F.N.</u>
Press blankets or blanketing for use with printing presses and stereotypers' and typesetters' blankets or blanketing:-		
(1) of a class or kind not made in Canada	Free	5 p.c.
(2) of a class or kind made in Canada	15 p.c.	20 p.c.

At present, offset press blankets and blanketing of a class or kind not made in Canada are dutiable under tariff item 53415-1, Free, B.P. and 5 p.c., M.F.N. It is understood that all importations have been deemed to be of a class or kind not made in Canada, and have therefore been classified under tariff item 53415-1. At the present time, blankets cut to size, if any were ruled of a class or kind made in Canada, would be entered as parts of printing presses, duty-free, B.P. and either Free or 10 p.c., M.F.N.; if imported as blanketing, they would be dutiable under tariff item 61800-1 at 15 p.c., B.P. and 20 p.c. M.F.N., when of rubber. Thus, the effect of the proposal would be to increase the rates of duty on blankets of a class or kind made in Canada when cut to size; this is the form in which they are normally sold to the ultimate user.

G.A.I.A. proposed that no change be made in existing tariff item 53415-1, and the Canadian Pulp and Paper Association proposed that there be no increases in the present rates of duty. The Canadian Daily Newspaper Publishers Association proposed that press blankets for use in the production of newspapers be duty-free.

#### Typecasting and Typesetting Machinery and Apparatus

The proposals of G.A.I.A. respecting typecasting and typesetting machinery and apparatus are shown along with existing tariff items on the following pages.

The proposal for a duty on such goods when of a class or kind made in Canada would have virtually no effect at the present time because no typecasting or typesetting equipment is made in Canada. Nor would the proposed end-use restrictions have much effect, because most classes of users of typesetting equipment are named. The proposed changes in wording would, however, attract goods which are not now classified as typecasting or typesetting machines.



Graphic Arts Industries Association  
Proposals Respecting Typecasting and Typesetting Machinery and Apparatus

<u>Tariff Item</u>	<u>Existing Tariff Items</u>	<u>Proposed Tariff Items (a)</u>		<u>Imports</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>B.P.</u>	<u>M.F.N.</u>
				1964 \$'000				
41215-1	Typecasting and typesetting machines and parts thereof for use in printing offices.....	Free	Free	4,411				
41220-1	Typemaking accessories... n.o.p.....	Free	10 p.c.	..				
		Machinery, apparatus or equipment of all kinds and processes, e.g., mechanical, chemical, photochemical, electrical, photoelectrical, electrostatic, electronic, photoelectronic, electrolytic, photolytics, vacuum forming, or radiant, for the purpose of printing, typesetting, including phototypesetting, teletypesetting, tape perforating, typecasting, type justifying and computerization for the operation of such machinery or equipment, or otherwise reproducing images of a permanent or semi-permanent nature by such means;... or typemaking accessories, for use in conjunction with the foregoing or as independent units; when for use exclusively by and in their capacities as commercial printers, publishers, lithographers, typesetters, bookbinders, manufacturers of stereotypes, electrotypes, and printing plates or rolls, but not for use by firms or organizations which are only incidentally						

(a) The portions underlined apply specifically to typecasting and typesetting machinery and apparatus

Graphic Arts Industries Association  
Proposals Respecting Typesetting Machinery and Apparatus

Existing Tariff Items

Proposed Tariff Items

Imports  
1964  
\$'000

Tariff  
Item

B.P.   M.F.N.

B.P.   M.F.N.

engaged in printing, and paper, film, plastic, or foil converters, or by manufacturers of articles made from paper, cardboard, film, plastic, or foil,

(1) when of a class or kind not made in Canada; parts thereof, not to include motive power.....

Free   Free

(2) when of a class or kind made in Canada; parts thereof, not to include motive power.....

Free   7½ p.c.

A great deal of progress has recently been made in the development of equipment for saving labour in typesetting. For example, there are now machines on which an operator, by actuating a keyboard, produces perforated tape from text; the perforated tape can be fed into another machine in order to "justify" it. There are also keyboard machines on which an operator can produce justified tape directly. The justified tape is then used to actuate a line casting machine automatically. There are machines for transmitting text by teletype; stock quotations are often typeset automatically from data received in this manner. There are also machines on which an operator can type a page of justified text designed for offset printing. Mention has already been made of optical character recognition apparatus based on photoelectrical principals.

Most of this machinery and equipment does not qualify under tariff item 41215-1; while some is now duty-free under tariff items 41205-1 and 46240-1, most of it is dutiable under tariff items 42720-1, 44524-1 and others. The principal effect of the proposal would, therefore, be to extend appreciably the range of machinery entitled to duty-free entry.

The newspaper publishers, as previously indicated, wanted all machinery and equipment which they use made duty-free. The Canadian Pulp and Paper Association proposed the retention of tariff item 41215-1 unchanged and the removal of the duties under tariff item 41220-1.

W.R. Grace and Company Limited proposed that tariff item 41215-1 be restricted to goods of a class or kind not made in Canada, but that the end-use provision be removed.

Joseph McDowell Sales Limited, Toronto, an importer of some equipment for justifying and tape perforating in connection with typesetting, supported the proposal of G.A.I.A. to make such equipment duty-free.

The Canadian Electrical Manufacturers Association opposed the proposed extensions of the item as encompassing electrical apparatus.

#### Other Machinery and Apparatus

##### Graphic Arts Industries Association

The proposals of G.A.I.A. respecting other machinery and apparatus are shown alongside existing tariff items in the table beginning on the following page.

"Mechanical folders, feeders" would replace, without much change in substance, the machines designed to fold or sheet-feed paper or cardboard in existing tariff item 41210-1. The proposed "deliveries, conveyors" would replace the mechanical deliveries or conveyors in existing tariff item 41200-1, but the existing end-use provision would be broadened.



Graphic Arts Industries Association  
Proposals Respecting Other Machinery and Apparatus

<u>Tariff Item</u>	<u>Existing Tariff Items</u>	<u>Imports</u>		<u>Proposed Tariff Items</u>
		<u>1963</u>	<u>\$'000</u>	
		<u>B.P.</u>	<u>M.F.N.</u>	<u>B.P.</u> <u>M.F.N.</u>
41200-1	...mechanical deliveries or conveyors, and parts thereof, (for use with printing presses as provided for in tariff item 41200-1)			...mechanical folders, feeders, deliveries, conveyors, driers...  Machinery and apparatus, n.o.p., viz: Gun and mould apparatus for making press rollers;
41205-1	Machinery and apparatus, n.o.p., viz: Gun mould apparatus for making press rollers; Machines and apparatus for making electrotypes and typecasting machines; Engraving machines and apparatus, including photo-engraving apparatus, and other platemaking apparatus used in the manufacture of printing plates of all kinds; Machines and apparatus for graining metal plates; Machines and apparatus for sensitizing, grinding or polishing metal plates; Machines and apparatus including cameras and camera equipment,	Free	Free	Machines and apparatus for making electrotypes, matrices, and stereotypes; remelting furnaces and apparatus for stereotypes and typecasting machines;  Engraving machines and apparatus, including photo-engraving apparatus, and other platemaking apparatus used in the manufacture of printing plates of all kinds;  Machines and apparatus for graining, sensitizing, grinding or polishing printing plates;  Machines and apparatus including cameras and camera equipment, lenses, camera and printing lamps, prisms,

Graphic Arts Industries Association  
Proposals Respecting Other Machinery and Apparatus (Cont'd)

<u>Tariff Item</u>	<u>Existing Tariff Items</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>Imports 1963 \$'000</u>	<u>Proposed Tariff Items</u>	<u>B.P.</u>	<u>M.F.N.</u>
	lens, prisms, camera and printing lamps, screens, and vacuum frames, for transferring by photographic processes, or direct, to plates or rolls for use in lithography, rotogravure and printing;				screens, and vacuum frames for transferring by any process, or direct, to plates, rolls, film, plastic, or paper for use in letterpress, lithography, gravure, or other printing;		
	Shading apparatus;				Machines and apparatus for addressing and/or wrapping newspapers, magazines, other periodicals, pamphlets and catalogues;		
	Machines and apparatus for addressing and/or wrapping newspapers, magazines, periodicals, pamphlets and catalogues;				Machines and apparatus for embossing or stamping or producing embossed or engraved effects, bronzing, dusting, varnishing, carbon coating;		
	Machines and apparatus for embossing or stamping or producing embossed or engraved effects, book-binding, looping, stitching, sewing, gathering, inserting, bronzing, dusting, creasing, scoring, cutting, perforating, drilling, punching, glueing, pasting, gumming, waxing, flocking, coating, drying,				Machines and apparatus for slitting, rewinding, tube-making, staying or stripping, reinforcing or box covering;		
					Machines and apparatus for bookbinding, looping, stitching, sewing, folding, gathering, inserting, creasing, scoring, cutting, perforating, drilling, punching, eyeletting, glueing, pasting, gumming, waxing, flocking, coating, drying,		

Graphic Arts Industries Association  
Proposals Respecting Other Machinery and Apparatus (Cont'd)

### Existing Tariff Items

Proposed Tariff ItemsImports

1963

<u>Tariff</u>	<u>Item</u>
100	100
101	101
102	102
103	103
104	104
105	105
106	106
107	107
108	108
109	109
110	110
111	111
112	112
113	113
114	114
115	115
116	116
117	117
118	118
119	119
120	120
121	121
122	122
123	123
124	124
125	125
126	126
127	127
128	128
129	129
130	130
131	131
132	132
133	133
134	134
135	135
136	136
137	137
138	138
139	139
140	140
141	141
142	142
143	143
144	144
145	145
146	146
147	147
148	148
149	149
150	150
151	151
152	152
153	153
154	154
155	155
156	156
157	157
158	158
159	159
160	160
161	161
162	162
163	163
164	164
165	165
166	166
167	167
168	168
169	169
170	170
171	171
172	172
173	173
174	174
175	175
176	176
177	177
178	178
179	179
180	180
181	181
182	182
183	183
184	184
185	185
186	186
187	187
188	188
189	189
190	190
191	191
192	192
193	193
194	194
195	195
196	196
197	197
198	198
199	199
200	200
201	201
202	202
203	203
204	204
205	205
206	206
207	207
208	208
209	209
210	210
211	211
212	212
213	213
214	214
215	215
216	216
217	217
218	218
219	219
220	220
221	221
222	222
223	223
224	224
225	225
226	226
227	227
228	228
229	229
230	230
231	231
232	232
233	233
234	234
235	235
236	236
237	237
238	238
239	239
240	240
241	241
242	242
243	243
244	244
245	245
246	246
247	247
248	248
249	249
250	250
251	251
252	252
253	253
254	254
255	255
256	256
257	257
258	258
259	259
260	260
261	261

BP  
MFN

B.P. M.F.N.

gumming, waxing, varnish-  
ing, carbon coating, patch-  
ing, numbering, ruling, jog-  
ging, sheet piling, tying,  
bundling, tube-making, metal  
mounting, eyeletting, stay-  
ing or stripping, rein-  
forcing and box-covering;  
Parts of the foregoing not to  
include saws, knives and  
motive power;

washing, patching, numbering, ruling, jogging, sheet-piling, tying, bundling, metal mounting, counting of paper or cardboard;

All of the foregoing when for use exclusively by and in their capacities as commercial printers, publishers, lithographers, typesetters, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, but not for use by firms or organizations which are only incidentally engaged in printing, and paper, film plastic, or foil converters, or by manufacturers of articles made from paper, cardboard, film, plastic, or foil,

(1) when of a class or kind not made in Canada; parts thereof, not to include motive power.....

from paper, cardboard or foil.....	Free	Free 17,786	(a)
------------------------------------	------	-------------	-----

Free



Graphic Arts Industries Association  
Proposals Respecting Other Machinery and Apparatus (Cont'd)

<u>Existing Tariff Items</u>		<u>Proposed Tariff Items</u>	
<u>Tariff Item</u>		<u>Imports</u>	
		<u>1963</u>	<u>B.P. M.F.N.</u>
		<u>\$'000</u>	
41210-1	...machines designed to fold or sheet-feed paper or cardboard, and complete parts thereof.....		<u>B.P. M.F.N.</u>
		(b) Free 10 p.c. 1,076	Free 7½ p.c.
		(2) when of a class or kind made in Canada; parts thereof, not to include motive power.....	

(a) Includes imports entered under tariff item 41225-1, and mechanical deliveries and conveyors entered under tariff item 41200-1, but such imports are believed to be small

(b) Dutiable imports under s.c. 5511

The proposed provision for "machines and apparatus for making...matrices" would be an addition to the printing machinery schedule. These machines, if of a class or kind made in Canada, are now classified under tariff item 42701-1, at 10 p.c., B.P. and 22½ p.c., M.F.N.; otherwise, they are dutiable under tariff item 42720-1, Free, B.P. and 7½ p.c., M.F.N. G.A.I.A. also proposed that machines and apparatus for flocking, coating, drying, washing, and counting of paper or cardboard be added. These machines are dutiable mainly under tariff item 42701-1 or 42720-1, depending upon whether or not they are of a class or kind made in Canada.

There were other goods for which G.A.I.A. proposed specific provision but which would in fact duplicate existing provisions which G.A.I.A. wanted retained. Remelting furnaces and apparatus for stereotypes and typesetting machines are now classified as "other plate-making apparatus" in tariff item 41205-1 and as "typemaking accessories" in tariff item 41220-1, depending on the intended use. Numerous changes were proposed by G.A.I.A. in the paragraph relating to camera and camera equipment but, as far as can be ascertained, very little change in substance would in fact be involved. The proposed addition of the words "Machines and apparatus for...folding" would appear to duplicate the proposed provision for "mechanical folders". In addition, G.A.I.A. proposed the deletion of "shading apparatus" as obsolete.

The proposed end-use provisions were the same as those in the proposed item for printing presses. Comparing these with the existing end-use provision of tariff item 41205-1, the coverage of the proposed item would be extended to include typesetters, film and plastic converters and manufacturers of articles made from those materials. The use of the item by printers would be qualified by the phrase "but not for use by firms or organizations which are only incidentally engaged in printing".

The proposals respecting rates would involve both increases and decreases, and the net effect would probably not be large. The principal increase in rates would be the proposed imposition of a most-favoured-nation duty of 7½ p.c. on goods of a class or kind made in Canada now entered duty-free under tariff item 41205-1. The principal decreases would result from some of the proposed new wording which would attract goods now dutiable under various tariff items of more general application.

### Other Users

The proposals of the newspaper publishers have been described above in connection with printing presses.

The Canadian Pulp and Paper Association proposed that the rates under tariff item 41205-1 be left unchanged and that the most-favoured-nation rate of 10 p.c. on machines designed to fold or sheet-feed paper or cardboard under tariff item 41210-1 be removed. In addition, it proposed that tariff item 41205-1 be extended to cover the following machinery:

- "Off machine" coating machinery and apparatus
- Supercalenders
- Ream wrapping machines

Cut size wrapping machines  
 Fibre can making machines  
 Laminating machines  
 Printer slotters  
 Wrapping machines using paper and film  
 Folding box sealing machines  
 Heat sealing machines for bonding plastics to paperboard  
 Paper folding and interfolding machines  
 Packaging presses  
 Scalloping machines  
 Creping machines  
 Paper plying machines  
 Paper and film banding machines  
 Paper and film labelling machines  
 Spiral paper core winders  
 Spiral paper core cutting machines  
 Sanitary napkin machines

These goods are now dutiable for the most part under tariff item 42720-1 at Free, B.P. and  $7\frac{1}{2}$  p.c., M.F.N., if they are not of a class or kind made in Canada, or under tariff item 42701-1 at 10 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N. if they are.

The Canadian Book Manufacturers Institute, the Canadian Paper Box Manufacturers Association, and the Periodical Press Association supported the proposal of G.A.I.A. respecting changes to tariff item 41205-1. The Institute of Business Form Manufacturers supported G.A.I.A. with respect to wording, but contended the goods should be duty-free whether or not of a class or kind made in Canada.

W.R. Grace and Company of Canada Limited proposed that tariff item 41205-1 be restricted to goods of a class or kind not made in Canada, but that the end-use restrictions in the item be removed.

William E. Coutts Company Limited, Toronto, a manufacturer of greeting cards, proposed "retention of the present wording of tariff items and rates of duty, particularly with regard to tariff item 41205-1".

Sonoco Products Company of Canada Limited, Brantford, Ontario, a manufacturer of paper tubes, cores and cones for textiles and other materials, sought continuation of the existing duty-free provisions of tariff item 41205-1 and its extension to include machinery and apparatus used in flocking, lacquer-tipping, grinding and striping paper cones and tubes, and in squeezing, notching, pressing and pulling operations to make paper mill cores with metal tips.

A submission was made by the following three manufacturers of printed ceiling tiles:

Canadian Johns-Manville Company Limited, Port Credit, Ont.  
 Building Products Limited, LaSalle, Que.  
 Domtar Construction Materials Limited, Montreal.



They proposed that tariff item 41205-1 be amended to include manufacturers of articles made from wood pulp or groundwood.

Union Carbide Canada Limited, Toronto proposed that heat sealing machines be added to tariff item 41205-1; many plastic products are heat sealed. This proposal was supported by G.A.I.A.

### Manufacturing Interests

As already indicated, most of the machinery and equipment under review is not available from Canadian manufacturers. There were, none the less, certain Canadian manufacturing interests involved, and some representations were made.

The Machinery and Equipment Manufacturers' Association of Canada proposed that tariff item 41205-1 be amended to provide for the following rates of duty:

	<u>B.P.</u>	<u>M.F.N.</u>
(1) of a class or kind made in Canada	10 p.c.	22 $\frac{1}{2}$ p.c.
(2) of a class or kind not made in Canada	Free	Free

Failing that, the Association proposed that the words "slitting, rewinding" be deleted from the item. The spokesman for the Association said that the slitters and rewinders used by converters had roll widths less than 72 inches, and were not made in Canada. However, he said that paper manufacturers had been importing the larger sizes under tariff item 41205-1, when for converting operations, and that these were available from Canadian manufacturers.

Ashton Press Manufacturing Company Limited proposed the establishment of the following tariff item:<sup>(1)</sup>

	<u>B.P.</u>	<u>M.F.N.</u>
Machinery and apparatus for use in the manufacture of manifold business forms, viz:		
Continuous forms collators		
Snap set collators		
Continuous forms interleavers		
Stitchers		
Crimp lock machines		
Carbon processors		
Hot carbon printers		
and parts thereof	Free	10 p.c.

<sup>(1)</sup> See also the proposal of Ashton respecting printing presses

It would seem that the goods listed in the proposal are now provided for in tariff 41205-1, duty-free under the B.P. and M.F.N. Tariffs.

Hydraulic Machinery Company Limited, Montreal, reported it was developing an hydraulic paper cutter, and requested protection for that product. Such a machine would now be duty-free under tariff item 41205-1 when for the uses specified in the item.

The Canadian Electrical Manufacturers Association made two proposals with respect to existing tariff item 41205-1. It proposed that the existing exclusion of motive power from the provision in the item governing parts be maintained. In addition, the Association proposed that the phrases "machinery and apparatus" and "machines and apparatus" in the item be replaced by "machinery, n.o.p.". With regard to the latter proposal, the spokesman for the Association stated:

"The existence of a broad word such as 'apparatus' (without any qualifications such as 'electrical apparatus') will create confusion and uncertainties in the minds of importers and administrators as to what goods are to be encompassed. For this reason alone we believe that the word should not be incorporated in the tariff if it can possibly be avoided.

"We therefore respectfully urge that in re-drafting the proposed tariff schedule in this Reference, the word 'apparatus' should not be used; that eo nomine enumerations be used to the greatest possible extent; where provision must be made for mechanical equipment and/or components therefor, the traditional provision 'machinery and parts thereof' be maintained throughout. We believe that it is only by following these general principles that a desirable degree of specificity can be achieved." (page 521)

Fluid Power Limited, Rexdale, Ontario, informed the Board by letter that it manufactures hydraulic presses which can be used for moulding rubber printing plates; presses imported for that purpose are classified under tariff item 41205-1, duty-free under the B.P. and M.F.N. Tariffs. The company associated itself with the submission of the Machinery and Equipment Manufacturers' Association in seeking protection on the goods it manufactures.

### Importers

Cameron Machine Company of Dover, New Jersey, requested that no change be made in the part of tariff item 41205-1 relating to cutting, slitting and rewinding machines and apparatus when used by paper or foil converters.

### Printing Plates Moulds and Transfers

The tariff items under review relating to printing plates, moulds and transfers are reproduced in the table beginning on the following page.

Existing Tariff Items Providing  
for Printing Plates, Moulds or Transfers

<u>Tariff Item</u>		<u>B.P.</u>	<u>M.F.N.</u>	<u>Imports 1963 \$'000</u>
<u>For General Application or for Advertising:</u>				
47200-1 (in part)	Plates, rolls and cylinders engraved on wood, or on steel or other metal, and transfers taken from same, n.o.p.; .....	10 p.c.	15 p.c.	1,813(a)
47300-1	Plates for printing in two or more colours, including elec- trotypes, nickeltypes and all engravings on steel or other metal, for use exclusively in printing, n.o.p. ....	Free	15 p.c.	244
47400-1	Stereotypes, electrotypes and celluloids, for almanacs, ca- lendars, illustrated pamphlets, newspaper or other advertise- ments, n.o.p.; and matrices or copper shells for such stereo- types, electrotypes and cellu- loids.....per square inch	1 ct.	1 ct.	74
47505-1	Stereotypes, electrotypes, cel- luloids and bases for the same, composed wholly or in part of metal or celluloid, n.o.p., and copper shells for such stereo- types, electrotypes and cellu- loids.....per square inch	1/8 ct.	1/8 ct.	23
47510-1	Matrices for stereotypes, elec- trotypes and celluloids des- cribed in item 47505-1 per square inch	Free	1/2 ct.	5
	Total			2,159

(a) This figure includes imports of blank engravers' plates, rolls and cylinders



Existing Tariff Items Providing  
for Printing Plates, Moulds or Transfers (Cont'd)

<u>Tariff Item</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>Imports 1963 \$'000</u>
<u>For Other Specified Purposes:</u>			
47305-1 Printing plates of all kinds for periodical publications enjoying second-class mailing privileges, the pages of which are regularly bound, wire- stitched or otherwise fastened together, and matrices, metal bases and copper shells there- for, but not to include print- ing plates and other articles covered by tariff item 47500-1.....	Free	Free	468
47500-1 Stereotypes, electrotypes, rubber plates and celluloids for books, and bases and mat- rices and copper shells for such printing plates; positive and negative films of periodi- cal publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues.....	Free	Free	429
47515-1 Plates and electrotypes of metal and positive and negative films, for printing music.....	Free	Free)	91
47520-1 Printing plates, n.o.p., whether for printing or litho- graphing, and transfers taken from same, and positive and negative films, for use exclus- ively in the production of books which are included in the curriculum of any university, college or school in Canada, for use as text books or as works of reference, not to include dictionaries.....	Free	Free)	
47525-1 Matrices of non-advertising news pictures for reproduction in newspapers and periodical publications enjoying second- class mailing privileges.....	Free	Free	
Total			
Grand Total			* 988 3,147

The general item covering engraved metal or wood printing plates for one-colour work, and transfers, is tariff item 47200-1 with rates of 10 p.c., B.P. and 15 p.c., M.F.N. Printing plates for two or more colours are provided for in tariff item 47300-1 at Free, B.P. and 15 p.c., M.F.N. Most duplicate printing plates and moulds for advertisements are entered under tariff item 47400-1 at one cent per square inch under both the B.P. and M.F.N. Tariffs. Most other duplicate printing plates are classified under tariff item 47505-1 at 1/8 ct. per square inch. There are, in addition, the other end-use items shown in the table. Printing plates, or in some cases substitutes therefor, for periodicals, most books and music, and for non-advertising news pictures for newspapers are duty-free.

Certain printing plates and moulds are provided for elsewhere in the Customs Tariff, although the trade in them would be small. Some are entered as manufactures of rubber under tariff item 61800-1 at 15 p.c., B.P. and 20 p.c., M.F.N. Some aluminum offset printing plates are dutiable under tariff item 35400-1 at 15 p.c., B.P. and 22½ p.c., M.F.N. Copper rollers and stones used in the printing of textile fabrics or wallpaper are specially provided for in tariff item 37000-1, Free, B.P. and 10 p.c., M.F.N.

As has already been indicated, only a few printing plate makers were represented at the public hearing. One manufacturer of gravure cylinders, Roto-Tone Gravure Services Limited, Cooksville, Ontario, was a signatory to a brief submitted by a group of firms engaged in polishing, graining or otherwise finishing blank metal plates. During the course of the public hearing, this group was to some extent joined by representatives of two large printing plate makers, Rapid Grip and Batten Limited and Bomac Electrotpe Company Limited. This enlarged group, while by no means of one mind in all respects, finally produced a set of proposals respecting printing plates, which is reproduced on the following page.

Basically, the proposal is that, with specified exceptions, all printing plates, moulds or transfers be provided for in a single item with rates of 15 p.c., B.P. and 20 p.c., M.F.N.; this compares, for example, with the existing rates under tariff item 47200-1 of 10 p.c., B.P. and 15 p.c., M.F.N.

Exception (a)(i), while worded differently, would more or less replace tariff item 47400-1 with no change in rates. The other exceptions, for which continuing duty-free entry was proposed, represent a considerable reduction in the scope of the existing end-use items; however, judging from subsequent statements made at the public hearing, the printing plate makers did not press this part of their proposals and were prepared to agree to the continuation of the existing end-use provisions.

Thus, in summary, the group sought to consolidate most of the existing tariff items of general application into one tariff item with an increase in duties of approximately five percentage points. They also wanted a separate item which would include the advertising matrices with no change in duties.

Proposals by Certain Printing Plate Makers and Others(a)

	<u>B.P.</u>	<u>M.F.N.</u>
Printing plates, original or duplicate, curved or not, rolls, cylinders; of steel or other metal, of plastic of any type, of wood, of paper, or other material, or of combinations thereof; moulds, mats, matrices or shells, of any material, being impressions from or of printing plates; exposed positive or negative photographic or photosensitive films, prints or duplicates therefrom; all of the foregoing when carrying a printed, etched, engraved, embossed, moulded, formed or otherwise produced image on the surface thereof.....	15 p.c.	20 p.c.

Except:

(a) Pattern electros, electrotypes shells, electrotypes moulds, pattern stereos, matrices, reproproofs, exposed film:		
(i) for duplication in Canada, per square inch.....	1 ct.	1 ct.
(ii) for paid advertisements in newspapers or periodicals but not to include advertising for articles manufactured in Canada or offered for sale in Canada.....	Free	Free
(iii) for books and music to be printed in Canada subsequent to printing and publishing in a foreign country.....	Free	Free
(b) Matrices, reproproofs or exposed film of non-advertising news pictures for reproduction in newspapers or periodicals.....	Free	Free

- (a) Those associated with the proposals were:
- Bomac Electrotypes Company Limited, Toronto
  - W.E. Booth Company Limited, Toronto
  - Canadian Fine Colour Company Limited, Toronto
  - Commercial Litho Plate Graining Limited, Montreal
  - Latimer Limited, Toronto
  - Minnesota Mining and Manufacturing of Canada Limited, London
  - National Hard Chrome Plating Company Limited, Weston, Ontario
  - Rapid Grip and Batten Limited, Toronto
  - Roto-Tone Gravure Services Limited, Cooksville, Ontario



G.A.I.A. made the following proposal to replace existing Tariff items relating to printing plates, moulds and transfers:

	<u>B.P.</u>	<u>M.F.N.</u>
Original or duplicate printing plates, flat; curved or cylindrical, of all kinds, including engravings, electrotypes, stereotypes, nickel-types, celluloids, rubber or plastic plates; bases, matrices and copper shells for such plates; exposed positive and negative films;		
(1) above when for use in newspapers or periodicals regularly issued at stated intervals of at least four times a year.....	Free	Free
(2) above when for books or catalogues.....	Free	Free
(3) all other printing plates, etc., above enumerated.....	Free	15 p.c.

The proposal is more comprehensive than the existing items under review in that it would attract most printing plates, moulds and transfers which are now classified elsewhere; however, the trade which would be involved in these extensions is believed to be small. The proposal would extend the range of end-uses for which printing plates, moulds and transfers would be duty-free; it would also broaden the existing provisions for the free entry of such goods for newspapers, books and catalogues. In addition, the existing British Preferential Tariff of 10 p.c. on printing plates and transfers now entered under tariff item 47200-1 would be removed. The net effect of the proposals would be some reduction in the duties on printing plates, moulds and transfers.

The Periodical Press Association and the Canadian Book Manufacturers Institute supported the proposals of G.A.I.A.

The Canadian Daily Newspaper Publishers Association proposed that "printing plates for use in the production of newspapers" be made duty-free. With regard to other related products, the Association proposed the creation of the following tariff item:

	<u>B.P.</u>	<u>M.F.N.</u>
Articles and materials, not including goods enumerated in item 18700-1, which enter into the cost of production of printing plates for newspapers	Free	Free

The Canadian Weekly Newspapers Association made proposals which would be similar in effect to those of the daily newspaper publishers.

The Canadian Pulp and Paper Association proposed that there be no increase in the rates provided for in tariff item 47300-1.

Materials for Printing Plate Makers

The tariff items under review which cover blank plates and other materials for printing plates are reproduced on the following page.

There are other blank plates ready for making printing plates which are not provided for in the tariff items under review. Of greatest importance among these in terms of value are grained or pre-sensitized plates or sheets of aluminum; they are dutiable under tariff item 35400-1 at 15 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N. Most blank paper plates, or masters, are dutiable under tariff item 18110-1 at Free, B.P. and  $7\frac{1}{2}$  p.c., M.F.N. Some when of rubber are dutiable under tariff item 61800-1 at 15 p.c., B.P. and 20 p.c., M.F.N. Those of plastic, other than the ones covered by tariff items 66005-1 and 66010-1, are dutiable according to composition. There are undoubtedly plates of other kinds, as well as moulding materials, which are dutiable elsewhere in the Tariff.

Printing plate makers use a variety of other materials in their work; some of these are mentioned in the section on the market.

The following seven manufacturers of blank plates or cylinders made a proposal respecting blank plates:

W.E. Booth Company Limited, Toronto  
 Canadian Fine Color Company Limited, Toronto  
 Commercial Litho Plate Graining Limited, Montreal  
 Latimer Limited, Toronto  
 Minnesota Mining and Manufacturing of Canada Limited, London  
 National Hard Chrome Plating Company Limited, Weston, Ont.  
 Roto-Tone Gravure Service Limited, Cooksville, Ont.

Booth and Latimer grind and polish metal plates. Canadian Fine Color and Commercial Litho produce grained aluminum and zinc plates. Minnesota Mining and Manufacturing produces pre-sensitized aluminum plates. National Hard Chrome manufactures bi-metallic and tri-metallic plates. Roto-Tone makes gravure printing cylinders, producing its own copper-plated steel cylinders for that purpose.

The group proposed the following tariff item to cover all blank plates ready for use in making printing plates:

	<u>B.P.</u>	<u>M.F.N.</u>
Plates, curved or not, rolls, cylinders; of steel or other metal, or plastic of any type, of wood, of paper, or other material, or of combinations thereof; coated or not, light sensitive or not; fully prepared for manufacture of original printing plates by mechanical, photomechanical, photochemical, photo-electric or any other processes; but not carrying a printed, etched, engraved or embossed image on the printing surface thereof	15 p.c.	20 p.c.

Tariff Items Under Review Which Relate to  
Blank Plates and other Materials for Printing Plates

<u>Tariff Item</u>	<u>B.P.</u>	<u>M.F.N.</u>	<u>Remarks</u>
30200-1 Lithographic stones, not engraved.....	Free	15 p.c.	This item is seldom, if ever, used
47200-1 ...engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates.....	10 p.c.	15 p.c.	In effect, this item encompasses all plates of metal for use in making relief printing plates
66000-1 Moulding material consisting of a mixture of synthetic rubber and wax with a backing of aluminum not exceeding .006 inch in thickness, for use by electrotypers in the manu- facture of electrotypes.....	Free	7½ p.c.	This item is believed to have been designed to provide for plastic plates of a particular kind which are used to make printing plates on automatic electronic photo- engraving units
66005-1 Synthetic resin or cellulose plastic sheets or plates, coated or not, with or without turned edges, for the produc- tion of engravings for use by printers.....	Free	7½ p.c.	This item encompasses "Dycril" plates
66010-1 Plates, curved or not, consist- ing of a layer of cellulose plastic composition and metal, coated or not, for the produc- tion of printing plates.....	10 p.c.	10 p.c.	



The group indicated it was very anxious to have uniform rates of duty covering all blank plates. One of their spokesmen said:

"It makes little sense for a Canadian manufacturer to have protection on a material he is producing if he is losing his market to a material being imported at a low or lower rate of duty merely because it is new." (page 644)

The group complained in particular of the existence of tariff item 66010-1, under which Dycril plates can be imported at 10 p.c. under both the British Preferential and the Most-Favoured-Nation Tariffs. The rates proposed would mean some increases and some decreases; on balance there would probably be some net increase in duties. There would be a reduction of  $2\frac{1}{2}$  percentage points in the most-favoured-nation rate on aluminum offset plates, and the rates on rubber blank plates would remain unchanged; the rates on most other blank plates would be increased.

G.A.I.A. made proposals, which are reproduced on the following page, on behalf of certain printing plate makers to cover virtually all the materials used in making printing plates and moulds.

The proposed items would replace tariff item 47200-1 in so far as it relates to engravers' plates and tariff items 66000-1, 66005-1 and 66010-1. They also encompass goods provided for in tariff items not at present under review, including tariff items 22005-1, 35400-1, 61800-1 and 90800-1. It will be noted, however, that some parts of the proposal are qualified by end use provisions. Substantial reductions in duty are envisaged.

The Periodical Press Association supported the proposals of G.A.I.A. The Canadian Book Manufacturers Institute did likewise, but made the following reservation:

"The book manufacturing industry submits that so long as the Government of Canada is prepared for free entry of books under tariff items 17000-1, 17200-1, 17205-1, 17210-1 and 17305-1 to 17330-1 that any component entering into the manufacture of these books should be available to Canadian manufacturers without duty so long as no comparable Canadian manufactured product is available." (page 306)

The Canadian Daily Newspaper Publishers Association proposed the following item:

	<u>B.P.</u>	<u>M.F.N.</u>
Articles and materials which enter into the cost of production of printing plates for newspapers, not including goods enumerated in tariff item 18700-1	Free	Free

The Canadian Pulp and Paper Association proposed that there be no increase in the rates under tariff items 66005-1 or 66010-1.

Proposals by G.A.I.A. Respecting Materials  
for Printing Plates and Moulds

	<u>B.P.</u>	<u>M.F.N.</u>
Moulding materials consisting of vinyl resins in sheet form; moulding compounds consisting of synthetic rubber and vinyl plastic; laminated vinyl with thin aluminum in centre; all the foregoing for use in platemaking	Free	Free
Plate manufacturing materials of all kinds, including carbon tissue and silver image resists, when for use exclusively in processing or making printing plates, not to include items enumerated in Tariff Item 18700-1; vinyl polymers precompounded in liquid form; unfinished printing plates of zinc, magnesium, aluminum copper, plastic, paper, or a combination of any of these, light sensitive coated or not, manufactured to specific dimensions;		
All of the foregoing when for use exclusively by and in their capacities as commercial printers, publishers, lithographers, manufacturers of stereotypes, electrotypes and printing plates or rolls, but not for use by firms or organizations which are only incidentally engaged in printing, and paper, film, plastic, or foil converters or by manufacturers of articles made from paper, cardboard; film, plastic, or foil		
(1) when of a class or kind not made in Canada	Free	Free
(2) when of a class or kind made in Canada	7½ p.c.	7½ p.c.
Materials for backing printing plates consisting of perforated aluminum or steel, cheese cloth and vinyl	Free	Free
Plate levelling materials composed of paper or wood fibres impregnated with vinyl resins; plate levelling discs or strips composed of felt packing mixed with resins covered with a thin aluminum sheet	Free	Free
Chemical preparations, compounded of more than one substance, for exclusive use in the manufacture of lithographic or other printing plates		
(1) when of a class or kind not made in Canada	Free	Free
(2) when of a class or kind made in Canada	15 p.c.	20 p.c.



Du Pont of Canada Limited, Montreal, which imports Dycril under tariff item 66010-1 from an associated company in the United States, made the following statement in its proposals dated November 13, 1964;

"These products are not now made in Canada, and have been so ruled by the Department of National Revenue. As the Board knows, however, in the course of Reference 120 the Chemical Industry Committee proposed to the Board that a considerable revision be made in the criteria for determining whether a product is to be ruled 'not made in Canada'. Du Pont of Canada strongly supported that proposal, and has in no way modified its position since that time.

"If the criteria for determining the made in Canada status of imported products are to remain unchanged, the Company's proposal is that 'Dycril' photopolymer plates for printing (now ruled not made in Canada) be admitted free of duty.

"On the other hand, if the criteria are to be changed in line with the proposal made by the Chemical Industry Committee, and strongly endorsed by the Company, and if the effect of these changes was that 'Dycril' photopolymer plates for printing were ruled to be made in Canada, then the Company's position would clearly be that an appropriate rate of duty should be applied."

Lion Rubber and Plastics Limited, a manufacturer of rubber products, sought retention of existing arrangements whereby rubber moulding materials and blank rubber plates are dutiable under tariff item 61800-1 at 15 p.c., B.P. and 20 p.c., M.F.N. The company opposed the proposals of G.A.I.A. to make moulding materials and plate manufacturing materials duty-free.

#### Zinc Strip or Sheet for Blank Plates

The following provisions of tariff item 34610-1 relating to materials for blank plates are under review:

	<u>B.P.</u>	<u>M.F.N.</u>
34610-1 ...zinc strip or sheet, ungrained, whether or not ground, for making offset plates for lithographing; zinc strip or sheet, not planished, ground or polished, coated on one side with acid-resisting material, to be prepared for use in photo-engraving; all the foregoing if containing not more than ten per cent by weight of other metal or metals.....	Free	Free

The zinc strip or sheet specified in this item is imported for further processing into blank relief or offset plates.



The group of plate manufacturers which submitted a brief proposed that tariff item 34610-1 be retained in its present form. One of them, however, indicated that his experience with the item had been less satisfactory since 1958 when some of the wording in the item was changed.<sup>(1)</sup> G.A.I.A. and the Canadian Pulp and Paper Association both proposed that the item be retained in its present form.

Type for Printing

	<u>B.P.</u>	<u>M.F.N.</u>
34000-1      Type for printing, including chases, quoins and slugs, of all kinds	7½ p.c.	17½ p.c.

G.A.I.A. proposed that this tariff item be replaced by the following:

	<u>B.P.</u>	<u>M.F.N.</u>
Foundry type of original or exclusive design for printing, including chases and quoins of all kinds; printers' furniture for use with a chase	Free	Free
Leads, slugs and other spacing materials for printing forms; type n.o.p.	7½ p.c.	17½ p.c.

The Canadian Book Manufacturers Institute and the Periodical Press Association supported the proposal. With regard to type, the aim of G.A.I.A. was apparently to provide continuing protection of 7½ p.c., B.P. and 17½ p.c., M.F.N. on the type which is cast in Canada and to obtain duty-free entry for other type. Aside altogether from any assessment of the merit of the idea, there is considerable doubt that the proposed wording would accomplish this objective. The precise meaning of the phrase "foundry type of original or exclusive design" is subject to considerable doubt and there is certainly no consensus of opinion that it has the meaning attached to it by G.A.I.A.

Chases are metal frames for holding composed type. A quoin is a sort of wedge for securing composed type in a chase. The spokesman for G.A.I.A. said that these goods were not made in Canada. The term "printers' furniture" is applied to rectangular shapes of metal or other materials used to fill in spaces between the type form and wall of the chase, and for other similar purposes. They are now classified according to composition.

(1) See Appendix G, Tariff History

Leads and slugs are spacing materials, and are made locally by most typesetters.

The Canadian Pulp and Paper Association proposed that there be no increase in the duties under tariff item 34000-1.

Type Metal and Babbit Metal

		<u>B.P.</u>	<u>M.F.N.</u>
34100-1	Babbit metal and type metal, in blocks, bars, plates and sheets	10 p.c.	20 p.c.

G.A.I.A. and seven manufacturers of blank plates or cylinders proposed that no change be made in tariff item 34100-1. The Canadian Pulp and Paper Association proposed that there be no increase in the existing rates of duty. No representations were made by manufacturers of babbit metal or type metal.

None of those who made representations would appear to have very much interest in babbit metal, which is used principally in machinery for anti-friction purposes.

Other Proposals

G.A.I.A. proposed certain changes in tariff item 41225-1, which is now as follows:

		<u>B.P.</u>	<u>M.F.N.</u>
41225-1	Articles and materials which enter into the construction and form part of the machines and apparatus provided for in tariff item 41205-1, when imported by manufacturers of such machines, apparatus and parts thereof, for use exclusively in the manufacture of such goods in their own factories under such regulations as the Minister may prescribe.....	Free	Free

The Association proposed that the item be expanded to include articles and materials for printing presses.

The Canadian Book Manufacturers Institute supported the proposal of G.A.I.A. The Canadian Pulp and Paper Association proposed that tariff item 41225-1 be left unchanged. W.R. Grace and Company of Canada Limited proposed that the item be deleted.

G.A.I.A. also proposed the creation of the following new tariff item:

	<u>B.P.</u>	<u>M.F.N.</u>
Type cabinets, flat top, or with working tops; type cases; storage cabinets for galleys, matrices, matrix magazines, chases; storage cabinets for plates, electrotypes, stereo- types; imposing tables and components; makeup tables; galleys		
(1) when of a class or kind not made in Canada	Free	Free
(2) when of a class or kind made in Canada	10 p.c.	15 p.c.

The Periodical Press Association and the Canadian Book Manufacturers Institute supported the proposal.

It is possible that some of these goods are now covered by the phrase "typemaking accessories" in tariff item 41220-1, a phrase which G.A.I.A. sought to have retained in the Tariff. Otherwise, the goods specified in the above proposal are not provided for in the tariff items under review.

The Canadian Daily Newspaper Publishers Association proposed that tympan paper for use in the production of newspapers be made duty-free. The term "tympan paper" is applied to a special paper used on printing presses for packing behind the impression surface, which is usually of rubber. It is now dutiable mainly under tariff item 19700-1, 15 p.c., B.P. and 22½ p.c., M.F.N., or tariff item 19900-1, 17½ p.c., B.P. and 22½ p.c., M.F.N., depending upon composition and degree of manufacture. Tympan paper for some of the requirements of newspapers is made in Canada.

Canadian Kodak Company Limited, Toronto, while expressing no interest in the tariff items under review as at present worded, indicated they would oppose the extension of any of these items to include sensitized film or sensitized paper materials manufactured by the company in Canada; such materials are now classified under tariff item 18700-1. In fact, no proposals impinging on the interests of the company were made.

McGraw Colorgraph Company, Los Angeles, California, a manufacturer of photo stencil film and roto-gravure pigment paper, urged that:

"...the tariff item classification for products used in the printing industry be redrafted so as to bring within a duty free classification all products of whatever composition which become a part of or are used or consumed in the manufacture of printing presses, printing plates, silk screen stencil, roto-gravure cylinders or other apparatus used in any type of printing or reproduction method." (page 837)



The Chemical Industry Committee for Study of Tariff Reference No. 120 proposed that no recommendations be made, by way of end-use items, or otherwise, which would affect the classification of chemicals or plastics falling within the scope of Reference 120.







SUMMARY AND CONCLUSIONS

This inquiry covered most of the machinery and equipment, including the printing plates and related products, used in printing and a wide variety of machines and equipment used in the conversion of paper, cardboard or foil into finished products. For the most part, this machinery and equipment is not made in Canada and much of it now enters Canada free of duty.

The Graphic Arts Industries Association made the principal submissions on behalf of the commercial printing industry and allied graphic arts. The proposals of the Association would result in a considerable change in the wording and structure of the existing tariff items and would introduce, in most of the major items, a differential in duties depending upon whether the machinery or equipment is or is not of a class or kind made in Canada. The Board is recommending some changes in the tariff structure and in rates of duty. However it is not recommending the introduction of any "made in Canada" items, but on the contrary it is recommending the deletion of this qualification in the only item within the terms of the reference in which it occurs.

The most significant changes recommended by the Board concern the tariff provisions relating to printing presses and typesetting and typesetting equipment.

In regard to printing presses, the Board is recommending the elimination of the 10 per cent duty on the larger presses which represent most of the requirements of commercial printers -- at present they are duty-free only for certain end uses; the smaller presses, which for the most part are used in business offices, would continue to be dutiable at 10 per cent under the Most-Favoured-Nation Tariff and free of duty under the British Preferential Tariff. Some of these smaller presses are now being manufactured in Canada and it is in this area that the Board considers Canadian production might well supply a significant share of the market. The Board is recommending a separate tariff item for printing presses and ancillary equipment used in the production of manifold business forms; for the most part the existing rates of duty would remain unchanged but on some of the ancillary equipment the most-favoured-nation rate of duty would be increased from Free to 10 per cent.

In regard to typesetting and typesetting equipment, this is the area in which technological changes appear to have created the most difficulties as far as the tariff is concerned. The Board is recommending the continuation of the existing duty-free provisions and a revision of the wording to provide for the newer types of machinery and products. The recommended item is intended to encompass the machinery and apparatus used in both "hot" and "cold" typesetting and the equipment for producing and using perforated tapes or other automatic typesetting media.

There are two parts of printing presses which require fairly frequent replacement — these are press blankets and press rolls.

Press blankets are of two sorts -- the offset blanket used on the printing cylinder of an offset press and the blanket used on the impression cylinder of a letterpress. At one time the latter was a blanket of wool or felt but today both sorts of blankets are made from a fabric which has been covered or impregnated with rubber or a composition material. Blankets and blanketing for offset presses are now being manufactured in Canada. The Board is recommending a separate item for press blankets and blanketing with a duty of 10 per cent under the British Preferential Tariff and 15 per cent under the Most-Favoured-Nation Tariff; on balance this represents some increase in the existing duties.

Press rolls, which are steel cylinders with a rubber or composition covering, must be re-covered at frequent intervals. There are several firms doing this work in Canada; they requested the introduction of a separate item for press rolls carrying higher rates of duties than those now in effect; press rolls are now dutiable as parts of presses. At the present time the Canadian companies are doing most of this work although some rolls are sent to the United States to be re-covered and returned. The inconveniences inherent in Customs clearances when the re-covering is done outside of Canada affords the Canadian firms a considerable advantage. In all the circumstances the Board is not recommending that a separate item be introduced for press rolls.

The manufacturers of articles made from paper, cardboard or foil may now import a wide variety of machinery and apparatus for use in such manufacturing free of duty. The Canadian Pulp and Paper Association proposed that a number of additional types of machinery and apparatus be added to the duty-free list. Machines for folding or sheet-feeding and machines for "flocking" or for counting sheets of paper, cardboard or foil are widely used by manufacturers of articles made from paper and also by commercial printers; as far as the Board could determine such machines are not being manufactured in Canada. The Board is recommending that these be added to the duty-free list; otherwise the Board was not impressed with the need of this industry for any additional exemptions from the general machinery provisions of the Tariff.

Turning now to printing plates of various kinds, the Board is not recommending any significant changes in the rates of duty. However the schedule recommended by the Board represents a considerable simplification of the existing provisions. At the present time there are thirteen items which the Board would replace with four items, Recommended Items XI to XIV inclusive.

Recommended Item XI would cover all those sheets, plates and rolls which have been processed in any manner in such a way as to com-



mit them to the production of printing plates. Many of these are now classified in the Tariff according to the component material of chief value which might be aluminum, zinc, plastic or rubber. Recommended Item XII would cover all the duty-free printing plates, matrices and transfers; this includes those for printing books, music, periodical publications and those containing non-advertising material for newspaper reproduction. Recommended Item XIII would cover all the dutiable "duplicate" printing plates and matrices and Recommended Item XIV would cover all the dutiable "original" printing plates and transfers. While this consolidation would result in some change in the duties on some plates the Board does not consider that it would have any significant effect on the business of the Canadian plate-makers.

While tariff item 18310-1 is not within the scope of this reference, in discussing the duties on matrices, some newspaper printers pointed out that week-end colour comics and "magazine" sections enter duty-free under item 18310-1 and while it may not have been possible to print them in Canada in 1936 when the item was first introduced, this is no longer the case. They felt that if it were not for the duty-free entry permitted under item 18310-1, many of the week-end comic and magazine supplements, now imported from the United States, would be printed in Canada. They took the view that as long as item 18310-1 remains in effect they should be permitted to import plates and matrices for such supplements free of duty; under the Board's recommendations such plates and matrices would be duty-free provided they did not contain advertising matter and were for reproduction in newspapers.

The Graphic Arts Industries Association, as well as some plate-makers, requested that supplies used in plate-making be covered by a special end-use provision. The Board was not satisfied that the circumstances warrant the establishment of an end-use item in this instance. These supplies include a wide variety of products falling under many tariff items. In the production of most printing plates the cost of these supplies would represent but a small part of the total cost and furthermore it is questionable whether the establishment of such an end-use item would result in any reduction in the cost to the printer.

Statistics are not available to make it possible to analyze imports in terms of the Board's recommended items. There is no doubt however that the net effect would be a substantial reduction in the duties payable by the commercial printing industry. Some additional types of machinery and apparatus have been added to the duty-free list and provision has been made for the duty-free entry of equipment which has been developed in recent years for the automatic setting of type. The major reduction in duties under the Most-Favoured-Nation Tariff would be on printing presses with a printing area of 374 square inches or more. Imports of such presses are not reported separately; however the Board estimates that the reduction in duties on such presses might well be \$500,000 to one million dollars in any one year.





RECOMMENDED SCHEDULE

1. That the following tariff items, enumerations of goods and rates of duty be revoked by Order in Council or deleted by amendment of Schedule A to the Customs Tariff:

30200-1, 34000-1, 34100-1, 34610-1, 41200-1, 41205-1, 41210-1, 41215-1, 41220-1, 41225-1, 47200-1, 47300-1, 47305-1, 47400-1, 47500-1, 47505-1, 47510-1, 47515-1, 47520-1, 47525-1, 53415-1, 66000-1, 66005-1 and 66010-1 and that Schedule A to the Customs Tariff be further amended by inserting therein the following items, enumerations of goods and rates of duty:

Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
I	Type, chases, quoins and slugs, for use in printing	Free	10 p.c.	20 p.c.
II	Babbit metal and type metal, in blocks, bars, plates and sheets.....	Free	10 p.c.	20 p.c.
III	Zinc rods; zinc shapes other than flat-rolled; all the foregoing if containing not more than ten per cent by weight of other metal or metals.....	Free	Free	10 p.c.
IV	Zinc strip or sheet, ungrained, whether or not ground, for making offset plates for lithographing; zinc strip or sheet, not ground or polished, coated on one side with acid-resisting material, when imported by grinders and polishers, to be prepared for use in photo-engraving; all the foregoing if containing not more than ten per cent by weight of other metal or metals.....	Free	Free	10 p.c.

Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
V	Machinery and equipment de- signed for the production of manifold business forms, including printing presses and ancillary equipment, for use in the production of such forms; parts there- of.....	Free	10 p.c.	15 p.c.
VI	Printing presses, n.o.p.: (a) with an image or print- ing area of 374 square inches or larger; me- chanical deliveries or conveyors for use with such presses; parts of the foregoing.....	Free	Free	15 p.c.
	(b) with an image or print- ing area of less than 374 square inches; parts thereof.....	Free	10 p.c.	15 p.c.
VII	Press blankets or blanket- ing for use with printing presses.....	10 p.c.	15 p.c.	25 p.c.
VIII	Machines and apparatus de- signed for typesetting, typesetting including phototypesetting, or for producing justified copy; machines and apparatus de- signed for creating or translating signals, on tape or wire or other media, for programing the auto- matic operation of the fore- going; typemaking accessories, n.o.p; parts of all the foregoing; stereotypers' blankets or blanketing.....	Free	Free	15 p.c.



Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
----------------	---	--	--	-------------------

IX Machinery and apparatus, excluding that provided for in Recommended Item V, for use exclusively by, and in their capacities as printers, lithographers, bookbinders, paper or foil converters, manufacturers of stereotypes, electrotypes and printing plates or rolls, or manufacturers of articles made from paper, cardboard or foil, namely:-

Machines and apparatus for making matrices, stereotypes, electrotypes or printing plates of any kind;

Machines and apparatus for the preparation of plates by graining, grinding, polishing or sensitizing;

Machines and apparatus, including cameras and camera equipment, lenses, prisms, camera and printing lamps, screens and vacuum frames, for transferring imagery to sensitized paper or film, or to plates or rolls;

Machines and apparatus for slitting, winding or rewinding, having a roll width of less than seventy-two inches;

Gun and mould apparatus for making press rollers;

Machines and apparatus for addressing or wrapping newspapers, magazines, periodicals, pamphlets and catalogues;

Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
IX (Cont'd)				
	Machines and apparatus for bookbinding, box-covering, bronzing, bundling, carbon coating, counting paper, cardboard or foil creasing, cutting, drilling, dusting, embossing or producing embossed or engraved effects, eyeletting, flocking, folding, gathering, glueing, gumming, inserting, jogging, Parts of all the fore- going.....		looping, metal mounting, numbering, pasting, patching, perforating, punching, reinforcing, ruling, scoring, sewing, sheet feeding, sheet piling, stamping, staying, stitching, stripping, tube-making, tying, varnishing, waxing;	
		Free	Free	15 p.c.
X	Articles and materials which enter into the construction and form part of the machines and apparatus entitled to entry under recommended items VI(a), VIII and IX for use in the manufacture of such ma- chines, apparatus and parts thereof.....	Free	Free	15 p.c.
XI	Sheets, plates, blocks, rolls or cylinders, ground, polished or otherwise pre- pared for the production of printing plates, rolls or cylinders.....	10 p.c.	15 p.c.	25 p.c.
XII	Printing plates of all kinds, including rolls and cylinders, for the reproduction of non- advertising material in news- papers, or for printing books or music, or for printing periodical publications enjoy- ing second-class mailing privi-			

Tariff Item	Goods Subject to Duty and Free Goods	British Prefer- ential Tariff	Most- Favoured- Nation Tariff	General Tariff
----------------	---	--	--	-------------------

XII (Cont'd)

leges the pages of which are regularly bound, wire-stitched or otherwise fastened together, not including catalogues; copper shells, bases, matrices, moulds, exposed positive or negative films and reproduction proofs, for such printing plates.....

Free

Free

25 p.c.

XIII Stereotypes, electrotypes, and other printing plates made from moulds, n.o.p.; copper shells, bases, matrices or moulds, for such printing plates

per square inch 1 ct.

1 ct.

1½ cts.

XIV Printing plates including rolls and cylinders, n.o.p.; exposed positive or negative films and reproduction proofs, for such printing plates.....

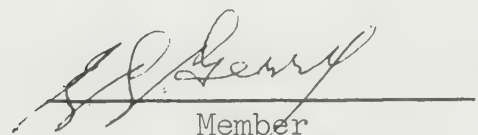
10 p.c.

15 p.c.

25 p.c.

2. That in order to take account of the replacement of tariff item 41205-1 by Recommended Item IX, a consequential change be made in tariff item 42605-1.

  
First Vice-Chairman

  
Member

  
Member

Ottawa, June 6, 1966





NOTES ON RECOMMENDED ITEMSRecommended Item I

I      Type, chases, quoins and slugs, for use in printing

Free	10 p.c.	20 p.c.
------	---------	---------

This item would replace existing tariff item 34000-1, with the rates reduced from  $7\frac{1}{2}$  p.c., B.P. and  $17\frac{1}{2}$  p.c., M.F.N. The arrangement of the wording has been changed slightly for clarification.

Most imports of type have been of type faces for which matrices have not been made available for reproduction. The Board was requested to provide duty free entry for such type. There was opposition by Canadian producers of type who contended that such a provision would affect their competitive position.

In the three years 1961 to 1963, imports that would qualify for entry under the British Preferential Tariff of Recommended Item I averaged \$21,000; those under the Most-Favoured-Nation Tariff, \$244,000.

Recommended Item II

II      Babbit metal and type metal, in blocks, bars, plates and sheets

Free	10 p.c.	20 p.c.
------	---------	---------

This item would replace tariff item 34100-1 with no change in wording, but with the rates reduced from 10 p.c., B.P. and 20 p.c., M.F.N.

Total imports of babbitt metal, mainly under the Most-Favoured-Nation Tariff, were valued at \$21,000 in 1963. Imports of type metal are not available but are believed to be negligible. Type metal is usually sold as part of a service to the printing industry.

Recommended Item III

III    Zinc rods; zinc shapes other than flat-rolled; all the foregoing if containing not more than ten per cent by weight of other metal or metals

Free	Free	10 p.c.
------	------	---------

This item reproduces without change the provisions of tariff item 34610-1 which are not included in the Reference.

Recommended Item IV

IV Zinc strip or sheet, ungrained, whether or not ground, for making offset plates for lithographing; zinc strip or sheet, not ground or polished, coated on one side with acid-resisting material, when imported by grinders and polishers, to be prepared for use in photo-engraving; all the foregoing if containing not more than ten per cent by weight of other metal or metals

Free

Free

10 p.c.

This item along with Recommended Item III, would provide for the goods now encompassed by tariff item 34610-1, with no change in rates.

The Board was informed of certain problems in respect to importations under the existing item. The recommended changes in wording are mainly to ensure that importations under the item are restricted to producers of blank plates and that ground or polished plates for photo-engraving are not imported under the item.

Imports of the goods that would fall under Recommended Item IV have been decreasing in recent years; in 1963 such imports were valued at \$166,000, mostly under the Most-Favoured-Nation Tariff.

Recommended Item V

V Machinery and equipment designed for the production of manifold business forms, including printing presses and ancillary equipment, for use in the production of such forms; parts thereof

Free

10 p.c.

15 p.c.

The recommended item would provide for some printing presses now classified under tariff item 41220-1 without change in rates of duty; it would also attract ancillary equipment which is now admissible under tariff items 41205-1 duty-free under both the British Preferential and Most-Favoured-Nation Tariffs, as well as some machines designed to fold or sheet-feed paper or cardboard, now provided for in item 41210-1, without change in rates of duty. The recommended item would also provide for some machinery now classified under the general machinery items.

Machines and equipment for the production of manifold business forms are produced in Canada; in these circumstances the Board is recommending that the tariff now applicable to the printing presses should apply to the ancillary equipment as well.

From information supplied to the Board by the principal users of such equipment, imports of the goods which would be covered by Recommended Item V are estimated at \$500,000, annually more than half of which would consist of printing presses. Imports on which increased duties might apply under the recommended item are estimated at about \$150,000 annually.



Recommended Item VI

## VI Printing presses, n.o.p.:

- (a) with an image or printing area of 374 square inches or larger; mechanical deliveries or conveyors for use with such presses; parts of the foregoing

Free                      Free                      15 p.c.

- (b) with an image or printing area of less than 374 square inches; parts thereof

Free                      10 p.c.                      15 p.c.

This item would provide for all printing presses now classified under tariff items 41200-1, 41210-1 and 41220-1, except for those specified in Recommended Item V. The effect of this would be to remove the most-favoured-nation rate of 10 p.c. on most printing presses used by commercial printers while retaining this duty on the smaller printing presses used largely in business offices.

Imports of Printing Presses and Parts<sup>(a)</sup>

<u>Tariff Item</u>	<u>Tariff</u>	<u>Rate of Duty</u>	<u>1961</u>	<u>1962</u> (thousands of dollars)	<u>1963</u>	<u>1964</u>
41200-1	B.P.	Free	148	196	3,912	..
	M.F.N.	Free	3,046	4,010	3,689	..
	Total		3,194	4,206	7,601	..
41210-1	B.P.	Free	*	1	-	..
	M.F.N.	10 p.c.	94	81	41	..
	Total		94	82	41	..
41220-1	B.P.	Free	1,653	1,999	1,439	..
	M.F.N.	10 p.c.	13,064	12,828	13,184	..
	Total		14,717	14,827	14,623	..
Total	B.P.		1,801	2,196	5,351	4,896
	M.F.N.		16,204	16,919	16,914	17,529
	Total		18,005	19,115	22,265	22,425

(a) Excludes parts entered under tariff item 53415-1

It is believed that nearly all printing presses now imported under tariff item 41200-1 for printing newspapers, telephone directories or periodical publications would be attracted to Recommended Item VI(a), with continuing duty-free entry. The flat bed printing presses now imported under tariff item 41210-1 would be attracted to Recommended Item VI(a), with the consequent removal of the most-favoured-nation rate of 10 p.c. Recommended Item VI(a) would also attract those printing presses, now entered under tariff item 41220-1, which have an image or printing area of 374 square inches or larger,

except those provided for in Recommended Item V. Imports which were dutiable at the most-favoured-nation rate of 10 p.c. under tariff item 41220-1 averaged about \$13 million annually in the five years 1959 to 1963; the proportion of these imports which would have qualified for duty-free entry under Recommended Item VI(a) is not known, but it undoubtedly would have been substantial. It is estimated that the reduction in duty under Recommended Item VI(a) would be between \$500,000 and \$1,000,000 annually.

The smaller printing presses now classified under tariff item 41220-1 would be attracted to Recommended Item VI(b) or Recommended Item V; in either case the rates of duty would remain unchanged.

With regard to the mechanical deliveries and conveyors now provided for in tariff item 41200-1, an analysis of imports during two recent years indicates that imports of these goods amounted to less than \$100,000 annually. It is considered that, almost without exception, these would be for use with the larger presses and provision is made for them in part (a) of the recommended item.

The phrase "not to include saws, knives and motive power" in the parts provision of Existing Items 41200-1 and 41220-1 is not retained in the recommended item--see note on Existing Item 41200-1.

#### Recommended Item VII

VII Press blankets or blanketing for use with printing presses

10 p.c.	15 p.c.	25 p.c.
---------	---------	---------

Recommended Item VII would provide for the press blankets now classified under item 53415-1--see notes on Existing Item 53415-1.

Imports of press blankets or blanketing under item 53415-1 are not reported separately but imports of offset press blankets and blanketing are estimated at \$315,000 for the year 1964.

#### Recommended Item VIII

VIII Machines and apparatus designed for typecasting, typesetting including phototypesetting, or for producing justified copy; machines and apparatus designed for creating or translating signals, on tape or wire or other media, for programing the automatic operation of the foregoing; typemaking accessories, n.o.p; parts of all the foregoing; stereotypers' blankets or blanketing

Free	Free	15 p.c.
------	------	---------

Recommended Item VIII would provide for all the typecasting and typesetting machines and parts now classified under item 41215-1 with no change in rates.



Imports under item 41215-1, mainly under the Most-Favoured-Nation Tariff, averaged about \$3 million in the five years 1960 to 1964.

It was in this area of typesetting that the Board found the greatest technological changes in the apparatus and equipment used by the industry.

There are now machines and apparatus which produce justified copy on paper or film, from which offset printing plates are made. There is also equipment for the automatic operation of typesetting machines by means of perforated tapes. Some machines produce perforated justified tape and others produce unjustified tape; there is also equipment in which the input is an unjustified tape and the output is a justified tape. The automatic operation of typesetting equipment may in the future be done by magnetic tape or wire or some other means.

Recommended Item VIII, in addition to providing for the typesetters' and typesetters' equipment covered by Existing Item 41215-1, also makes provision for these newer types of equipment. It is not considered that the volume of this equipment used in Canada would warrant its manufacture in this country and the Board is recommending duty-free entry; at the present time this equipment may be classified under tariff item 42720-1 with rates of Free, B.P. and 7½ p.c., M.F.N., as machinery n.o.p., of a class or kind not made in Canada, or under tariff item 44524-1, as electric apparatus, at rates of 15 p.c., B.P. and 22½ p.c., M.F.N., or under item 41205-1 duty-free. No information respecting the value of this imported equipment is available but its use is known to be increasing.

There has been some question as to whether phototypesetting equipment is covered by Existing Item 41215-1; for this reason specific reference is made to phototypesetting in the recommended item.

Recommended Item VIII would also provide for stereotypers' blankets or blanketing which are now entered under item 53415-1, duty-free under the British Preferential Tariff and at 5 p.c. under the Most-Favoured-Nation Tariff, as well as for typemaking accessories which are now provided for under item 41220-1, at rates of Free, B.P. and 10 p.c., M.F.N. There are no available statistics on imports of stereotypers' blankets or blanketing; in 1963 imports of typemaking accessories under item 41220-1 were valued at \$60,000.

#### Recommended Item IX

IX Machinery and apparatus, excluding that provided for in Recommended Item V, for use exclusively by, and in their capacities as printers, lithographers, bookbinders, paper or foil converters, manufacturers of stereotypes, electrotypes and printing plates or rolls, or manufacturers of articles made from paper, cardboard or foil, namely:-

Machines and apparatus for making matrices, stereotypes, electrotypes or printing plates of any kind;



Machines and apparatus for the preparation of plates by graining, grinding, polishing or sensitizing;

Machines and apparatus, including cameras and camera equipment, lenses, prisms, camera and printing lamps, screens and vacuum frames, for transferring imagery to sensitized paper or film, or to plates or rolls;

Machines and apparatus for slitting, winding or re-winding, having a roll width of less than seventy-two inches;

Gun and mould apparatus for making press rollers;

Machines and apparatus for addressing or wrapping newspapers, magazines, periodicals, pamphlets and catalogues;

Machines and apparatus for

bookbinding,  
box-covering,  
bronzing,  
bundling,  
carbon coating,  
counting paper,  
    cardboard or foil  
creasing,  
cutting,  
drilling,  
dusting,  
embossing or producing  
    embossed or engraved  
    effects,  
eyeletting,  
flocking,  
folding,  
gathering,  
glueing,  
gumming,  
inserting,  
jogging,

looping,  
metal mounting,  
numbering,  
pasting,  
patching,  
perforating,  
punching,  
reinforcing,  
ruling,  
scoring,  
sewing,  
sheet feeding,  
sheet piling,  
stamping,  
staying,  
stitching,  
stripping,  
tube-making,  
tying,  
varnishing,  
waxing;

Parts of all the foregoing

Free

Free

15 p.c.

Recommended Item IX would replace tariff item 41205-1 with some changes in scope and wording and with continuing duty-free provisions under both the British Preferential and Most-Favoured-Nation Tariffs; any machinery and equipment for use in the production of manifold business forms, now classified under item 41205-1, would be attracted to Recommended Item V at rates of Free, B.P. and 10 p.c., M.F.N.

The recommended item provides for machines and apparatus for slitting, winding or rewinding, having roll widths of less than seventy-

two inches. Such machines and apparatus having roll widths of seventy-two inches or greater are produced in Canada by a number of firms; they are used largely in the paper industry and are classified under item 42706-1 at rates of 10 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N.

Machines and apparatus for making matrices, for counting paper, cardboard or foil, and for flocking, as well as camera equipment for transferring imagery to sensitized paper or film have been added to the existing provisions of item 41205-1. Most of this equipment is probably now classified under tariff item 42701-1 at 10 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N., or under tariff item 42720-1, Free, B.P., and  $7\frac{1}{2}$  p.c., M.F.N., or under tariff item 46240-1, free of duty under both the British Preferential and Most-Favoured-Nation Tariffs.

The recommended item also provides for machines and apparatus designed to fold or sheet-feed paper or cardboard. Machines for these purposes are now provided for in tariff item 41210-1, Free, B.P. and 10 p.c., M.F.N.; in 1963 imports under the Most-Favoured-Nation Tariff amounted to over one million dollars.

Total imports entered under tariff item 41205-1 during the five years 1959 to 1963, averaged about \$15 million, mostly under the Most-Favoured-Nation Tariff.

The Board is recommending the deletion of the provision for "shading apparatus" which is said to be no longer used. The phrase "not to include saws, knives and motive power" in the parts provision of the Existing Item 41205-1 is not retained in the recommended item--see notes on Existing Item 41200-1.

#### Recommended Item X

X Articles and materials which enter into the construction and form part of the machines and apparatus entitled to entry under recommended items VI(a), VIII and IX for use in the manufacture of such machines, apparatus and parts thereof

Free                      Free                      15 p.c.

This recommended item would replace tariff item 41225-1, with continuing duty-free entry. In addition, the item provides for articles and materials used in the manufacture of goods specified in Recommended Items VI(a) and VIII which are also duty-free. Since there is very little Canadian manufacture of the goods enumerated in Recommended Items VI(a), VIII and IX, imports under the recommended item would not be great.

#### Recommended Item XI

XI Sheets, plates, blocks, rolls or cylinders, ground, polished or otherwise prepared for the production of printing plates, rolls or cylinders

10 p.c.                      15 p.c.                      25 p.c.

The effect of this item would be to provide uniform rates of duty for all blank plates, sheets, blocks, rolls or cylinders.

Recommended Item XI would provide for engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon, now entered under item 47200-1, with no change in the existing rates of duty. The recommended item also provides for some of the goods specified in Existing Item 66000-1 as well as for the goods described in item 66005-1; both items carry rates of Free, B.P. and  $7\frac{1}{2}$  p.c., M.F.N. Goods provided for in item 66010-1, with rates of 10 p.c. under both the British Preferential and Most-Favoured-Nation Tariffs, would also be attracted to the recommended item. The recommended provision for "sheets, plates, blocks, rolls or cylinders...for the production of printing plates, rolls and cylinders" also encompasses goods now entered under existing tariff items of more general application, perhaps the most important would be blank aluminum plates for use in making lithographic printing plates which are now classified under tariff item 35400-1 at 15 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N.

There are no available statistics of imports which would be covered by Recommended Item XI; however, since the blank aluminum plates would account for a high percentage of total imports, the net effect of the item would be some reduction in the rates of duty.

#### Recommended Item XII

XII Printing plates of all kinds, including rolls and cylinders, for the reproduction of non-advertising material in newspapers, or for printing books or music, or for printing periodical publications enjoying second-class mailing privileges the pages of which are regularly bound, wire-stitched or otherwise fastened together, not including catalogues; copper shells, bases, matrices, moulds, exposed positive or negative films and reproduction proofs, for such printing plates

Free

Free

25 p.c.

This item provides for all printing plates, moulds and transfers for printing periodical publications, music and books. These goods are now mostly specified in tariff items 47305-1, 47500-1, 47515-1, 47520-1 and 47525-1, all of which provide duty-free entry. Imports entered under these items averaged \$936,000 in the three years 1961 to 1963, mostly under the Most-Favoured-Nation Tariff.

The item also provides for printing plates, moulds and transfers of non-advertising material for reproduction in newspapers; some of these are now duty-free under item 47525-1 while others are dutiable under items 47200-1, 47300-1, 47505-1 and 47510-1. However the total amount of duty involved is not great.



Recommended Item XIII

XIII Stereotypes, electrotypes, and other printing plates made from moulds, n.o.p.; copper shells, bases, matrices or moulds, for such printing plates ...per square inch

1 ct.                      1 ct.                      1½ ct.

The recommended item provides for the goods now covered by tariff item 47400-1 with no change in rates. It might also attract a small percentage of the goods now classified under items 47505-1 and 47510-1; most imports under these two items are believed to be of a non-advertising nature for reproduction in newspapers and would fall under Recommended Item XII.

Imports Entered Under Tariff Items 47400-1, 47505-1 and 47510-1

<u>Tariff Item</u>	<u>Tariff</u>	<u>Rate of Duty</u>	<u>1961</u>	<u>1962</u> (dollars)	<u>1963</u>
47400-1	B.P. )	1 ct. per	1,239	59	122
	M.F.N.)	sq. in.	97,899	95,331	74,161
	Total		99,138	95,390	74,283
47505-1	B.P. )	1/8 ct.	-	-	-
	M.F.N.)	per sq.in.	32,403	23,366	22,849
	Total		32,403	23,366	22,849
47510-1	B.P.	Free	-	-	-
	M.F.N.	½ ct. per	8,999	10,287	5,116
		sq. in.			
	Total		8,999	10,287	5,116

The phrase "other printing plates made from moulds" would encompass the celluloids provided for in tariff items 47400-1 and 47505-1 as well as all other moulded plates whether of plastic, rubber or composition; almost all moulded rubber printing plates are now dutiable under item 61800-1 at rates of 15 p.c., B.P. and 20 p.c., M.F.N.

Recommended Item XIV

XIV Printing plates including rolls and cylinders, n.o.p.; exposed positive or negative films and reproduction proofs, for such printing plates

10 p.c.                      15 p.c.                      25 p.c.

The recommended item would encompass most of the printing plates, rolls, cylinders and transfers now provided for in tariff item 47200-1 without change in rates and most of those provided for in tariff item 47300-1, at rates of Free, B.P. and 15 p.c., M.F.N.

Imports Entered Under Tariff Items 47200-1 and 47300-1

<u>Tariff Item</u>	<u>Tariff</u>	<u>Rate of Duty</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
			(thousands of dollars)		
47200-1(a)	B.P.	10 p.c.	18	19	15
	M.F.N.	15 p.c.	1,856	1,794	1,698
	Total		1,874	1,813	1,713
47300-1	B.P.	Free	4	8	2
	M.F.N.	15 p.c.	230	236	178
	Total		234	244	180

(a) The figures include imports of blank plates

The recommended item is somewhat broader in scope than the two existing items which it would replace. For example, it would include most lithographic printing plates of aluminum now dutiable under tariff item 35400-1 at 15 p.c., B.P. and  $22\frac{1}{2}$  p.c., M.F.N., and some of the rubber printing plates now dutiable under tariff item 61800-1 at 15 p.c., B.P. and 20 p.c., M.F.N. There are no available statistics to indicate the volume of such imports which would be attracted to the recommended item.

NOTES ON EXISTING ITEMS

relating to machinery, apparatus, printing  
plates and related products for the printing  
and allied industries

Existing Item 30200-1(GATT)

30200-1 Lithographic stones, not engraved

Free                      15 p.c.                      20 p.c.

Lithographic stones, usually of limestone, were formerly used as blank plates for making lithographic printing plates but they are no longer used commercially in Canada.

On the deletion of this item, imports, if any, would fall under Recommended Item XI as "sheets, plates, blocks...prepared for the production of printing plates, rolls or cylinders", at 10 p.c., B.P. and 15 p.c., M.F.N.

Existing Item 34000-1(GATT)

34000-1 Type for printing, including chases, quoins and slugs,  
of all kinds

7½ p.c.                      17½ p.c.                      20 p.c.

In the Board's Recommended Item I, item 34000-1 would be continued with slight changes in the arrangement of the wording and with the rates reduced to Free, B.P. and 10 p.c., M.F.N.

In recent years imports under this item were in the order of \$265,000 annually and consisted mainly of type for printing, mostly from the United States.

Existing Item 34100-1(GATT)

34100-1 Babbit metal and type metal, in blocks, bars, plates  
and sheets

10 p.c.                      20 p.c.                      20 p.c.

The wording of this item is retained in Recommended Item II; the recommended rates are Free, B.P. and 10 p.c., M.F.N.

Imports of babbitt metal, mostly from the United States, were valued at only \$21,000 in 1963, the last year for which separate statistics were kept; imports of type metal, while not reported separately, are believed to be negligible.



Existing Item 34610-1(GATT)

34610-1 Zinc rods; zinc shapes other than flat-rolled; zinc strip or sheet, ungrained, whether or not ground, for making offset plates for lithographing; zinc strip or sheet, not planished, ground or polished, coated on one side with acid-resisting material, to be prepared for use in photo-engraving; all the foregoing if containing not more than ten per cent by weight of other metal or metals

Free

Free

10 p.c.

The first part of this item providing for "zinc rods" and "zinc shapes other than flat-rolled" is outside the terms of the present Reference; these provisions are reproduced without change in Recommended Item III.

The remaining goods specified in tariff item 34610-1 are provided for in Recommended Item IV with continuing duty-free entry. Some changes in wording have been recommended, mainly to ensure that importations under the item are restricted to those made by manufacturers of blank plates for use in their production of such goods.

Total imports entered under the item have been declining; they were valued at \$166,000 in 1963, mostly from the United States.

Existing Item 41200-1

41200-1 Printing presses, of a class or kind not made in Canada, for use in the printing of newspapers, telephone directories or periodical publications which, if imported, would qualify for entry under tariff item 18405-1, and parts thereof, not to include saws, knives and motive power; mechanical deliveries or conveyors, and parts thereof, for use with the foregoing printing presses

Free

Free

Free

All or nearly all the goods now classified under this item would fall under Recommended Item VI (a), with continuing duty-free entry. Printing presses with a printing area less than 374 square inches would fall under Recommended Item VI (b), with continued free entry under the British Preferential Tariff and with a rate of 10 p.c. under the Most-Favoured-Nation Tariff, however it is doubtful that these small printing presses are used to any extent for the purposes specified in the existing item.

Tariff Item 41200-1 has caused administrative problems because of its end-use provisions. The Customs authorities require that, to qualify under the item, the press be used principally for the specified end-uses; under the recommended item classification would depend on the size of the printing area without any end-use provisions.

During the five years 1959 to 1963, imports of printing presses and parts under the item averaged about \$5 million; imports of mechanical deliveries or conveyors and parts, for use with the printing presses are estimated at less than \$100,000 annually. Over this five year period the United States supplied about 75 per cent of all imports under the item; the United Kingdom supplied something over 20 per cent.

The phrase "not to include saws, knives and motive power" which appears in the parts provision of tariff item 41200-1--and in several of the other tariff items in this Reference--is not retained in any of the recommended items. In the Board's view articles which are clearly identifiable as being dedicated for use with a particular machine should fall within any provision for parts of such machine unless there are compelling reasons for providing otherwise, for example see note on Existing Item 53415-1 respecting press blankets.

Existing Item 41205-1(GATT)

- 41205-1 Machinery and apparatus, n.o.p., viz.:
- Gun and mould apparatus for making press rollers;
  - Machines and apparatus for making electrotypes and stereotypes;
  - Engraving machines and apparatus, including photo-engraving apparatus, and other plate-making apparatus, used in the manufacture of printing plates of all kinds;
  - Machines and apparatus for graining metal plates;
  - Machines and apparatus for sensitizing, grinding or polishing metal plates;
  - Machines and apparatus including cameras and camera equipment, lens, prisms, camera and printing lamps, screens, and vacuum frames, for transferring by photographic processes, or direct, to plates or rolls for use in lithography, rotogravure and printing;
  - Shading apparatus;
  - Machines and apparatus for addressing and/or wrapping newspapers, magazines, periodicals, pamphlets and catalogues;
  - Machines and apparatus for embossing or stamping or producing embossed or engraved effects, bookbinding, looping, stitching, sewing, gathering, inserting, bronzing, dusting, creasing, scoring, cutting, perforating, drilling, punching, slitting, rewinding, glueing, pasting, gumming, waxing, varnishing, carbon coating, patching, numbering, ruling, jogging, sheet piling, tying, bundling, tube-making, metal-mounting, eye-letting, staying or stripping, reinforcing and box-covering;
  - Parts of the foregoing not to include saws, knives and motive power;
- All the foregoing, when for use exclusively by, and in their capacities as printers, lithographers, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, paper or foil converters, or by manufacturers of articles made from paper, cardboard or foil



All the goods now classified under item 41205-1, with the exception of shading apparatus and any goods which would be attracted to Recommended Item V, are provided for in Recommended Item IX with continuing duty-free entry. The Board was informed that shading apparatus was no longer used by the printing and allied industries.

During the five years 1959 to 1963, imports of machinery, apparatus and parts under the item averaged approximately \$15 million. The United States supplied something over 80 per cent of all imports of such goods; the United Kingdom and West Germany together supplied about 10 per cent.

The phrase "not to include saws, knives and motive power" in the parts provision of the item is not retained in the recommended item--see note on Existing Item 41200-1.

Existing Item 41210-1(GATT)

41210-1 Flat bed cylinder printing presses, to print sheets of a size 25 by 38 inches or larger, and complete parts thereof; machines designed to fold or sheet-feed paper or cardboard, and complete parts thereof

Free

10 p.c.

15 p.c.

The printing presses and parts specified in item 41210-1 are provided for in Recommended Item VI (a) and machines designed to fold or sheet-feed paper or cardboard would mostly fall in Recommended Item IX; both recommended items provide for the duty-free entry under the British Preferential and Most-Favoured-Nation Tariffs. Some machines designed to fold or sheet-feed paper or cardboard might be attracted to Recommended Item V with no change in rates of duty.

During the five years 1959 to 1963, imports of printing presses and parts under the item averaged about \$83,000 mostly from the United States; imports for machines designed to fold or sheet-feed paper or cardboard and parts averaged \$745,000, also mainly from the United States.

Existing Item 41215-1(GATT)

41215-1 Typesetting and typesetting machines and parts thereof for use in printing offices

Free

Free

Free

All the goods classified under item 41215-1 are provided for in Recommended Item VIII, with continuing duty-free entry.

During the five years 1960 to 1964, imports of the goods under this item averaged about \$3 million, mostly from the United States.



Existing Item 41220-1(GATT)

41220-1    Offset presses; lithographic presses; printing presses and typemaking accessories therefor, n.o.p.; complete parts of the foregoing, not to include saws, knives and motive power

Free

10 p.c.

15 p.c.

The printing presses specified in tariff item 41220-1 would fall under Recommended Items V, VI (a) or VI (b). Recommended Item V provides for machinery and equipment, including printing presses, designed for the production of manifold business forms, with no change in rates. Recommended Item VI (a) provides for duty-free entry under both the British Preferential and the Most-Favoured-Nation Tariffs, for all other printing presses with an image or printing area of 374 square inches or larger. Recommended Item VI (b) provides for rates of Free, B.P. and 10 p.c., M.F.N. on the remaining printing presses with an image or printing area less than 374 square inches--see notes on Recommended Items V and VI.

The typemaking accessories in the item would fall under Recommended Item VIII, duty-free under both the British Preferential and Most-Favoured-Nation Tariffs.

During the five years 1959 to 1963, imports of printing presses and parts entered under the item averaged about \$13 million. The United States supplied about 75 per cent of these imports; the United Kingdom and West Germany each supplied something over 10 per cent. During the same period imports of typemaking accessories averaged about \$74,000 yearly, mostly from the United States.

The phrase "not to include saws, knives and motive power" in the parts provision of the item is not retained in the recommended item--see notes on Existing Item 41200-1.

Existing Item 41225-1

41225-1    Articles and materials which enter into the construction and form part of the machines and apparatus provided for in tariff item 41205-1, when imported by manufacturers of such machines, apparatus and parts thereof, for use exclusively in the manufacture of such goods in their own factories under such regulations as the Minister may prescribe

Free

Free

Free

All the goods now classified under item 41225-1 are provided for in Recommended Item X with continuing duty-free entry.

Imports under the item are believed to be small.

Existing Item 47200-1

47200-1 Plates, rolls and cylinders engraved on wood, or on steel or other metal, and transfers taken from same, n.o.p.; engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates

10 p.c.

15 p.c.

20 p.c.

Tariff item 47200-1 provides for certain types of printing plates and transfers as well as for engravers' blank plates.

Most of the plates, rolls and cylinders engraved on wood, or on steel or other metal, are provided for in Recommended Item XIV with no change in rates of duty. Most of the transfers provided for in the existing item would also fall under Recommended Item XIV as "exposed positive or negative films and reproduction proofs, for such printing plates"; some of the printing plates, rolls, cylinders and transfers provided for in item 47200-1 would, however, fall under Recommended Item XII which provides for duty-free entry under both the British Preferential and Most-Favoured-Nation Tariffs.

The engravers' blank plates rolls and cylinders provided for in item 47200-1 would fall under Recommended Item XI with no change in the rates of duty.

During the five years 1960 to 1964, imports under the item, nearly all from the United States, averaged \$1.6 million; of this amount it is estimated that engravers' blank plates account for about \$500,000 yearly.

Existing Item 47300-1

47300-1 Plates for printing in two or more colours, including electrotypes, nickeltypes and all engravings on steel or other metal, for use exclusively in printing, n.o.p.

Free

15 p.c.

20 p.c.

Most of the printing plates provided for in this item would fall under Recommended Item XIV; the British Preferential rate would be increased to 10 p.c. and there would be no change in the Most-Favoured-Nation rate. Printing plates containing non-advertising material for reproduction in newspapers would be classified under Recommended Item XII, duty-free under both the British Preferential and Most-Favoured-Nation Tariffs.

Imports under the item have amounted to about \$200,000 yearly, nearly all from the United States.

Existing Item 47305-1

47305-1     Printing plates of all kinds for periodical publications enjoying second-class mailing privileges, the pages of which are regularly bound, wire-stitched or otherwise fastened together, and matrices, metal bases and copper shells therefor, but not to include printing plates and other articles covered by tariff item 47500-1

Free

Free

25 p.c.

All the goods now classified under this tariff item are provided for in Recommended Item XII, with continued free entry.

During the five years 1960 to 1964, imports of goods under the item averaged about \$500,000, nearly all from the United States.

Existing Item 47400-1(GATT)

47400-1     Stereotypes, electrotypes and celluloids, for almanacs, calendars, illustrated pamphlets, newspaper or other advertisements, n.o.p.; and matrices or copper shells for such stereotypes, electrotypes and celluloids.... per square inch

1 ct.

1 ct.

1½ ct.

All the goods now classified under this item are provided for in Recommended Item XIII with no change in rates.

Celluloids, while not specified in the recommended item would be included in the provision for "other printing plates made from moulds".

During the five years 1959 to 1963, imports under the item averaged about \$100,000, nearly all from the United States.

Existing Item 47500-1

47500-1     Stereotypes, electrotypes, rubber plates and celluloids for books, and bases and matrices and copper shells for such printing plates; positive and negative films of periodical publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues

Free

Free

Free



All the goods now classified under this item are provided for in Recommended Item XII with no change in the rates of duty. While stereotypes, electrotypes, rubber plates and celluloids are not specified in the recommended item, they would be classified as printing plates.

During the five years 1960 to 1964, imports of goods specified in the item averaged \$323,000, mostly from the United States.

Existing Item 47505-1

47505-1 Stereotypes, electrotypes, celluloids and bases for the same, composed wholly or in part of metal or celluloid, n.o.p., and copper shells for such stereotypes, electrotypes and celluloids.....per square inch

1/8 ct.                      1/8 ct.                      1/8 ct.

Much of the goods now classified under this item would consist of non-advertising material for reproduction in newspapers and would be attracted to Recommended Item XII, which provides duty-free entry.

Total imports under the item, all from the United States, were valued at \$23,000 in 1963.

Existing Item 47510-1(GATT)

47510-1 Matrices for stereotypes, electrotypes and celluloids described in item 47505-1.....per square inch

Free                       $\frac{1}{2}$  ct.                       $\frac{1}{2}$  ct.

Most of the goods now classified under this item would fall under Recommended Item XII, free of duty.

Imports entered under the item, all from the United States, amounted to \$5,116 in 1963.

Existing Item 47515-1(GATT)

47515-1 Plates and electrotypes of metal and positive and negative films, for printing music

Free                      Free                      Free

All the goods now classified under this item are provided for in Recommended Item XII, with continuing duty-free entry.

Imports under the item are not recorded separately; they are believed to be small.

Existing Item 47520-1

47520-1 Printing plates, n.o.p., whether for printing or lithographing, and transfers taken from same, and positive and negative films, for use exclusively in the production of books which are included in the curriculum of any university, college or school in Canada, for use as text books or as works of reference, not to include dictionaries

Free

Free

Free

All the goods now classified under this item are provided for in Recommended Item XII, with continuing duty-free entry.

Imports entered under this item are recorded along with those entered under tariff item 47515-1; together, they amounted to \$91,000 in 1963, mostly from the United States.

Existing Item 47525-1

47525-1 Matrices of non-advertising news pictures for reproduction in newspapers and periodical publications enjoying second-class mailing privileges

Free

Free

Free

The goods now classified under this tariff item are provided for in Recommended Item XII with continuing duty-free entry.

Imports entered under the item, all from the United States, amounted to \$447 in 1963.

Existing Item 53415-1(GATT)

53415-1 Press blankets or blanketing for use with printing presses and stereotypers' and typecasters' blankets or blanketing, of a class or kind not made in Canada

Free

5 p.c.

10 p.c.

The Board is recommending that this item be deleted and that special provision be made for press blankets or blanketing in Recommended Item VII at rates of 10 p.c., B.P. and 15 p.c., M.F.N. Press blankets in use today are made from heavy fabric either covered or impregnated with a rubber or composition material; at one time letterpress blankets were made of woollen cloth or felt. Offset press blankets and blanketing are now being made in Canada by the Miner Rubber Company Limited, Granby, Que. Under the existing tariff, once offset blankets are ruled to be "made in Canada", they would be classified as parts of presses; once blanketing is ruled "made in Canada" it would be classified according to material as a fabric or a manufacture of rubber or plastic.

Stereotypers' blankets are made from fabric or cork and are placed on top of the matrix paper while the matrix is being formed in the press. Some matrix papers now in use do not require any backing in the press by a blanket. However the blankets are still used to some extent and the Board is recommending that they be provided for in Recommended Item VIII, free of duty under both the British Preferential and the Most-Favoured-Nation Tariffs.

Typesetters' blankets, at least under that name, appear to be no longer used in the printing industry and the Board is making no special provision for them.

During the five years 1960 to 1964, imports of goods provided for under the item have averaged approximately \$800,000. During the period the United States supplied nearly 84 per cent of all such imports; the United Kingdom about 12 per cent.

Existing Item 66000-1

66000-1 Moulding material consisting of a mixture of synthetic rubber and wax with a backing of aluminum not exceeding .006 inch in thickness, for use by electrotypers in the manufacture of electrotypes

Free	7½ p.c.	30 p.c.
------	---------	---------

Item 66000-1 is believed to have been introduced to provide for a specific type of moulding material previously classified under item 35400-1 at 15 p.c., B.P. and 22½ p.c., M.F.N. The product, when imported in the form specified in Recommended Item XI would be dutiable at rates of 10 p.c., B.P. and 15 p.c., M.F.N; otherwise it would become dutiable under item 35400-1.

Imports under the item are small; in 1963 they amounted to about \$11,000, all from the United States.

Existing Item 66005-1(GATT)

66005-1 Synthetic resin or cellulose plastic sheets or plates, coated or not, with or without turned edges, for the production of engravings for use by printers

Free	7½ p.c.	30 p.c.
------	---------	---------

The goods classified under item 66005-1 are provided for in Recommended Item XI as "sheets, plates...otherwise prepared for the production of printing plates, rolls or cylinders". The British preferential rate would be increased to 10 p.c. and the most-favoured-nation rate to 15 p.c.

Imports entered under the tariff item are not available but are believed to be small. They consist largely of blank plates for use on electronic photo-engraving units.



Existing Item 66010-1

66010-1 Plates, curved or not, consisting of a layer of cellulose plastic composition and metal, coated or not, for the production of printing plates

10 p.c.

10 p.c.

30 p.c.

This is a temporary item introduced by Order in Council and the Board is recommending its deletion. The goods now classified under this tariff item are provided for in the Board's Recommended Item XI as "sheets, plates...prepared for the production of printing plates, rolls or cylinders"; the British preferential rate would remain unchanged, but the most-favoured-nation rate would be increased to 15 p.c.

Imports consist of Dycril blank plates imported for resale by Du Pont of Canada Limited.









APPENDIX ASTATISTICS OF IMPORTS AND EXPORTS

<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
1	Type for printing, including chases, quoins and slugs of all kinds	34000-1
2	Babbit metal in blocks, bars, plates and sheets	34100-1
3	Zinc and zinc alloys in bars, rods, plates, strip and sheet	34605-1, 34610-1
4	Printing presses, of a class or kind not made in Canada, for use in the printing of newspapers, telephone directories or periodical publications which, if imported, would qualify for entry under tariff item 18405-1, and parts thereof, not to include saws, knives and motive power	41200-1
5	Machinery and apparatus, n.o.p., as enumerated in tariff item 41205-1; articles and material specified in item 41225-1; mechanical deliveries and conveyors; machines designed to fold or sheet-feed paper or cardboard; and, parts	41200-1, 41205-1, 41210-1, 41225-1
6	Flat bed cylinder printing presses, to print sheets of a size 25 x 38 inches or larger, and complete parts thereof	41210-1
7	Typesetting and typesetting machines and parts thereof, for use in printing offices	41215-1
8	Offset presses; lithographic presses; printing presses, n.o.p.; and parts	41220-1
9	Typemaking accessories for printing presses, and parts	41220-1
10	Plates, rolls and cylinders engraved on wood, steel or other metal, and transfers taken from the same, n.o.p., engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates	47200-1

<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
11	Plates for printing in two or more colours, including electrotypes, nickeltypes and all engravings on steel or other metal, for use exclusively in printing, n.o.p.	47300-1
12	Printing plates of all kinds for periodical publications enjoying second-class mailing privileges, the pages of which are regularly bound, wire-stitched or otherwise fastened together, and matrices, metal bases and copper shells therefore, but not to include printing plates and other articles covered by tariff item 47500-1	47305-1
13	Stereotypes, electrotypes and celluloids for almanacs, calendars, illustrated pamphlets, newspaper or other advertisements, n.o.p., and matrices or copper shells for such stereotypes, electrotypes and celluloids	47400-1
14	Stereotypes, electrotypes, rubber plates and celluloids of books, and bases and matrices and copper shells for the same, whether composed wholly or in part of metal or celluloid; positive and negative films of periodical publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues	47500-1
15	Stereotypes, electrotypes and celluloids and bases for the same, composed wholly or partly of metal or celluloid, n.o.p., and copper shells for such stereotypes, electrotypes and celluloids	47505-1
16	Matrices for stereotypes, electrotypes and celluloids, and matrices for news pictures, enumerated in tariff item 47505-1	47510-1, 47525-1
17	Plates and electrotypes of metal for printing music, and printing plates, transfers and films, for printing school books	47515-1, 47520-1
18	Blankets or blanketing for printing presses, not made in Canada	53415-1



<u>Table</u>	<u>Imports</u>	<u>Tariff Item</u>
19	Moulding material of synthetic rubber and wax with a backing of aluminum not over .006 inches in thickness for the manufacture of electrotypes	66000-1
20	1964 Imports. These goods are not reported in the previous tables because of changes in the descriptions of the statistical classes for the year 1964	

EXPORTS

21	Printing, bookbinding machinery and parts
22	Electrotypes and stereotypes and engravers' plates

Table 1

Imports: Type for Printing, including chases, quoins and slugs of all kinds, s.c. 6199(a)

Tariff item 34000-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1948	180,502	180,502	30,785	17.1
1949	250,342	249,749	42,862	17.2
1950	215,874	215,874	35,874	16.6
1951	184,065	184,065	30,730	16.7
1952	158,288	158,288	25,839	16.3
1953	214,530	214,530	33,903	15.8
1954	190,855	190,855	30,697	16.1
1955	172,294	172,294	28,131	16.3
1956	229,730	229,730	38,300	16.7
1957	213,050	213,050	35,204	16.5
1958	240,542	240,542	39,784	16.5
1959	270,656	270,656	45,587	16.8
1960	219,361	217,641	36,393	16.7
1961	251,121	251,121	41,239	16.4
1962	296,520	295,363	49,979	16.9
1963	248,693	248,693	41,840	16.8
1964(b)	201,034	197,298	32,591	16.5

2. United Kingdom

1948	7,954	7,954	589	7.4
1949	8,436	8,436	633	7.5
1950	19,011	19,011	1,426	7.5
1951	14,862	14,862	1,115	7.5
1952	18,960	18,960	1,422	7.5
1953	36,406	36,406	2,731	7.5
1954	26,351	26,351	1,976	7.5
1955	20,267	20,267	1,521	7.5
1956	19,180	19,180	1,439	7.5
1957	20,826	20,826	1,562	7.5
1958	23,133	23,133	1,735	7.5
1959	17,966	17,966	1,348	7.5
1960	16,941	16,941	1,271	7.5
1961	27,143	27,143	2,036	7.5
1962	18,781	18,781	1,404	7.5
1963	17,970	17,970	1,378	7.7
1964(b)	15,933	15,933	1,163	7.3

Table 1  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>3. United States</u>				
1948	171,484	171,484	30,010	17.5
1949	240,626	240,033	42,005	17.5
1950	194,039	194,039	33,954	17.5
1951	162,049	162,049	28,363	17.5
1952	136,916	136,916	23,976	17.5
1953	170,431	170,431	29,826	17.5
1954	149,627	149,627	26,185	17.5
1955	142,895	142,895	25,010	17.5
1956	192,419	192,419	33,676	17.5
1957	176,705	176,705	30,926	17.5
1958	169,343	169,343	29,637	17.5
1959	212,708	212,708	37,246	17.5
1960	179,013	177,293	31,029	17.5
1961	209,294	209,294	36,628	17.5
1962	250,923	249,766	43,853	17.6
1963	220,975	220,975	38,765	17.5
1964(b)	183,049	179,313	31,075	17.3
<u>4. Germany</u> <sup>(c)</sup>				
1948-50	-	-	-	-
1951	413	413	72	17.4
1952	1,255	1,255	220	17.5
1953	1,196	1,196	209	17.5
1954	2,920	2,920	511	17.5
1955	4,238	4,238	743	17.5
1956	8,091	8,091	1,416	17.5
1957	11,152	11,152	1,952	17.5
1958	44,269	44,269	7,747	17.5
1959	37,680	37,680	6,591	17.5
1960	21,279	21,279	3,720	17.5
1961	11,964	11,964	2,099	17.5
1962	17,693	17,693	3,119	17.6
1963	7,712	7,712	1,341	17.4
1964(b)	2,052	2,052	353	17.2

(a) Beginning in 1964, classified under s.c. 526-24 and 526-57

(b) s.c. 526-57; includes only type for printing; other goods reported under s.c. 526-24 (see table 20)

(c) Beginning in 1952, West Germany only



Table 2

Imports: Babbit metal in blocks, bars, plates and sheets, s.c. 6121(a)

Tariff item 34100-1

<u>Year</u>	<u>Total Imports</u>		<u>Unit</u>	<u>Dutiable Imports</u>		<u>Duty</u>	<u>Duty as</u>
	<u>cwt.</u>	<u>\$</u>	<u>Value</u> <u>\$/cwt.</u>	<u>cwt.</u>	<u>\$</u>	<u>Collected</u> <u>\$</u>	<u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
<u>1. Total</u>							
1948	464	25,489	54.93	464	25,489	3,782	14.8
1949	884	29,696	33.59	884	29,696	4,253	14.3
1950	1,333	39,658	29.75	1,331	39,546	6,991	17.7
1951	300	23,963	79.88	296	23,406	4,187	17.9
1952	407	24,720	60.74	392	22,667	4,325	19.1
1953	484	21,558	44.54	480	21,063	3,733	17.7
1954	258	20,914	81.06	258	20,914	4,113	19.7
1955	430	34,559	80.37	430	34,559	6,452	18.7
1956	401	32,174	80.23	401	32,174	6,148	19.1
1957	371	30,094	81.12	371	30,094	5,742	19.1
1958	224	19,465	86.90	221	19,165	3,531	18.4
1959	657	30,276	46.08	656	30,145	5,344	17.7
1960	653	28,518	43.67	653	28,518	5,179	18.2
1961	771	29,094	37.74	769	28,793	5,241	18.2
1962	498	36,681	73.66	498	36,681	7,151	19.5
1963	204	21,091	103.39	204	21,091	4,098	19.4

2. United Kingdom

1948	157	13,158	83.81	157	13,158	1,316	10.0
1949	647	17,812	27.53	647	17,812	1,877	10.5
1950	129	9,180	71.16	129	9,180	918	10.0
1951	85	4,946	58.19	85	4,946	495	10.0
1952	32	2,084	65.13	32	2,084	208	10.0
1953	67	4,799	71.63	67	4,799	480	10.0
1954	20	698	34.90	20	698	70	10.0
1955	71	4,600	64.79	71	4,600	460	10.0
1956	45	2,868	63.73	45	2,868	287	10.0
1957	45	2,773	61.62	45	2,773	278	10.0
1958	41	3,023	73.73	41	3,023	302	10.0
1959	380	5,689	14.97	380	5,689	453	8.0
1960	358	3,953	11.04	358	3,953	268	6.8
1961	244	4,263	17.47	244	4,263	361	8.5
1962	112	1,186	10.59	112	1,186	84	7.1
1963	11	1,190	108.18	11	1,190	119	10.0

Table 2  
(Cont'd)Duty as  
p.c. of  
Dutiable  
Value

Year	Total Imports		Unit	Dutiable Imports		Duty	Dutiable
	cwt.	\$	Value \$/cwt.	cwt.	\$	Collected \$	Value
3. United States							
1948	307	12,331	40.17	307	12,331	2,466	20.0
1949	237	11,884	50.14	237	11,884	2,376	20.0
1950	324	18,461	56.98	322	18,349	3,670	20.0
1951	215	19,017	88.45	211	18,460	3,692	20.0
1952	375	22,636	60.36	360	20,583	4,117	20.0
1953	417	16,759	40.19	413	16,264	3,253	20.0
1954	238	20,216	84.94	238	20,216	4,043	20.0
1955	359	29,959	83.45	359	29,959	5,992	20.0
1956	356	29,306	82.32	356	29,306	5,861	20.0
1957	326	27,321	83.81	326	27,321	5,464	20.0
1958	183	16,442	89.85	180	16,142	3,229	20.0
1959	277	24,587	88.76	276	24,456	4,891	20.0
1960	295	24,565	83.27	295	24,565	4,911	20.0
1961	527	24,831	47.12	525	24,530	4,880	19.9
1962	386	35,495	91.96	386	35,495	7,067	19.9
1963	193	19,901	103.11	193	19,901	3,979	20.0

(a) Beginning in 1964, classified under s.c. 453-49 and 459-99

Table 3

Imports: Zinc and zinc alloys in bars, rods, plates, strip and sheet,  
s.c. 6113(a)

Tariff items 34605-1 and 34610-1

Year	Total Imports		Unit	Dutiable Imports		Duty	Duty as
	cwt.	\$	Value \$/cwt.	cwt.	\$	Collected \$	p.c. of Dutiable Value
<u>1. Total</u>							
1959 <sup>(b)</sup>	23,431	605,070	25.82	14,556	305,808	22,304	7.3
1960	18,868	485,784	25.75	12,288	249,458	17,926	7.2
1961	17,383	470,338	27.06	13,067	305,518	22,474	7.4
1962	15,299	426,222	27.86	11,485	274,676	21,069	7.7
1963	15,755	465,688	29.56	11,851	307,623	23,298	7.6
<u>2. United Kingdom</u>							
1959 <sup>(b)</sup>	3,589	60,136	16.76	2,597	40,941	2,083	5.1
1960	1,916	32,957	17.20	1,893	32,615	1,635	5.0
1961	1,370	23,046	16.82	1,302	21,936	1,185	5.4
1962	842	23,374	27.76	594	11,412	581	5.1
1963	386	8,024	20.79	377	7,862	424	5.4
<u>3. United States</u>							
1959 <sup>(b)</sup>	16,714	492,708	29.48	9,168	220,279	16,766	7.6
1960	12,586	378,787	30.10	6,232	149,067	11,216	7.5
1961	11,542	361,550	31.32	7,883	218,759	16,426	7.5
1962	9,486	309,111	32.59	6,374	183,490	14,781	8.1
1963	10,849	363,743	33.53	7,445	222,518	17,645	7.9
<u>4. Belgium<sup>(c)</sup></u>							
1959 <sup>(b)</sup>	2,747	46,786	17.03	2,443	39,871	3,125	7.8
1960	2,502	42,128	16.84	2,502	42,128	3,157	7.5
1961	1,893	32,628	17.24	1,872	32,223	2,419	7.5
1962	2,621	44,286	16.90	2,512	42,317	3,383	8.0
1963	2,519	44,451	17.65	2,519	44,451	3,396	7.6

(a) Beginning 1964, classified under s.c. 457-30 and 457-49

(b) Prior to 1959, comparable figures are not available

(c) Beginning 1960, including Luxembourg



Table 4

Imports: Printing presses, of a class or kind not made in Canada, for use in the printing of newspapers, telephone directories or periodical publications which, if imported, would qualify for entry under tariff item 18405-1, and parts thereof, not to include saws, knives and motive power, s.c. 5513(a)

Tariff item 41200-1

<u>Year</u>	<u>Total Imports</u>		<u>United Kingdom</u>	<u>United States</u>	<u>West Germany</u>
	No. of				
	Units	\$	\$	\$	\$
1948	34	1,785,786	-	1,785,786	-
1949	23	1,484,371	-	1,484,371	-
1950	35	2,530,274	-	2,530,274	-
1951	61	2,956,425	23,347	2,933,078	-
1952(b)	31	1,490,585	27,707	1,448,710	-
1953(c)	25	1,771,663	3,842	1,690,543	-
1954	26	2,145,382	285,206	1,817,735	21,059
1955	34	3,111,967	35,318	2,971,019	40,135
1956	39	3,011,434	12,198	2,935,808	50,164
1957	30	4,256,252	3,064	4,106,937	67
1958	14	1,091,911	193,818	806,305	76,744
1959	31	8,211,698	325,500	7,754,610	10,423
1960	17	1,488,374	642,409	832,929	12,440
1961	19	3,193,870	147,515	2,692,646	320,006
1962	30	4,206,046	196,222	3,992,299	10,970
1963	31	7,601,229	3,911,781	3,683,008	1,393

(a) Beginning in 1964, classified under s.c. 526-04, 526-08, 526-12 and 526-16 (see table 20)

(b) Prior to 1953 class 5513 was: "Presses for printing newspapers and telephone directories, of not less value by retail than fifteen hundred dollars each, of a class or kind not made in Canada, and complete parts thereof, not to include saws, knives and motive power; mechanical deliveries or conveyors for use with newspaper printing presses"

(c) Prior to 1954 class 5513 was: "Presses for printing newspapers and telephone directories, of a class or kind not made in Canada, and complete parts thereof, not to include saws, knives and motive power; mechanical deliveries or conveyors for use with newspaper printing presses"

Table 5

Imports: Machinery and apparatus, n.o.p., as enumerated in tariff item 41205-1 for use by printers, lithographers, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, paper or foil converters, or by manufacturers of articles made from paper or foil or cardboard; articles and materials, n.o.p., when used in the construction of above machines; mechanical deliveries and conveyors and parts thereof; machines designed to fold or sheet-feed paper or cardboard, and parts, s.c. 5511(a)

Tariff items 41200-1, 41205-1, 41210-1 and 41225-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1948	5,748,515	6,948	695	10.0
1949	5,671,685	1,998	200	10.0
1950	5,254,370	1,898	190	10.0
1951	6,901,277	8,924	892	10.0
1952(b)	5,752,713	2,457	246	10.0
1953(c)	6,671,167	22,332	2,233	10.0
1954	9,469,376	428,982	43,069	10.0
1955	11,730,916	297,271	29,074	9.8
1956	11,565,797	380,927	38,093	10.0
1957	13,347,343	832,773	83,694	10.1
1958	11,892,008	434,909	44,536	10.2
1959	13,903,661	567,110	57,202	10.1
1960	15,268,381	506,075	50,757	10.0
1961	14,665,082	827,975	80,038	9.7
1962	16,270,759	745,006	84,156	11.3
1963	18,862,167	1,076,196	100,553	9.3

Table 5  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>2. United Kingdom</u>				
1948	86,348	-	-	-
1949	111,457	-	-	-
1950	226,256	-	-	-
1951	363,893	-	-	-
1952(b)	326,304	-	-	-
1953(c)	320,503	-	-	-
1954	520,291	-	-	-
1955	284,502	-	-	-
1956	292,029	-	-	-
1957	580,138	2,244	224	10.0
1958	406,040	-	-	-
1959	342,306	-	-	-
1960	624,543	-	-	-
1961	350,128	-	-	-
1962	430,555	2,217	137	6.2
1963	579,169	-	-	-
<u>3. United States</u>				
1948	5,653,388	2,261	226	10.0
1949	5,414,273	-	-	-
1950	4,929,555	-	-	-
1951	6,178,348	-	-	-
1952(b)	5,063,480	-	-	-
1953(c)	5,878,966	-	-	-
1954	8,289,517	383,033	38,474	10.0
1955	10,617,489	259,208	26,010	10.0
1956	10,689,090	348,283	34,828	10.0
1957	11,585,263	737,587	73,759	10.0
1958	9,954,929	316,948	31,695	10.0
1959	11,986,380	475,443	47,694	10.0
1960	12,893,563	454,620	45,579	10.0
1961	12,467,649	688,876	66,127	9.6
1962	14,244,936	702,069	78,687	11.2
1963	16,137,936	1,042,781	97,193	9.3



Table 5  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>4. Germany</u> <sup>(d)</sup>				
1948	4,687	4,687	469	10.0
1949	12,098	1,998	200	10.0
1950	37,415	1,898	190	10.0
1951	158,391	8,924	892	10.0
1952 <sup>(b)</sup>	140,216	134	14	10.4
1953 <sup>(c)</sup>	168,781	1,422	142	10.0
1954	376,603	11,973	1,197	10.0
1955	628,876	14,264	1,426	10.0
1956	481,314	24,825	2,483	10.0
1957	820,793	26,019	2,602	10.0
1958	1,092,141	11,031	1,103	10.0
1959	1,099,324	33,291	3,229	9.7
1960	1,147,767	10,615	1,062	10.0
1961	1,319,219	37,964	3,795	10.0
1962	848,608	30,209	3,983	13.2
1963	1,159,846	20,296	2,035	10.0

(a) Beginning in 1964, classified mostly under the statistical classes outlined in table 20

(b) Prior to 1953 the class was: "Machinery and apparatus, n.o.p., as enumerated in tariff item 412a, for use by printers, lithographers, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, paper converters, or by manufacturers of articles made from paper or cardboard; articles and materials, n.o.p., when used in the construction of above machines"

(c) Prior to 1954 the class was: "Machinery and apparatus, n.o.p., as enumerated in tariff item 412a, for use by printers, lithographers, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, paper or foil converters, or by manufacturers of articles made from paper or foil or cardboard; articles and materials, n.o.p., when used in the construction of above machines"

(d) Beginning in 1952, West Germany only

Table 6

Imports: Flat bed cylinder printing presses, to print sheets of a size  
25 x 38 inches or larger, and complete parts thereof, s.c.  
5514(a)

Tariff item 41210-1

<u>Year</u>	<u>Total Imports</u>		<u>Dutiable Imports</u>		<u>Duty</u> <u>Collected</u>	<u>Duty as</u> <u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
	No. of Units	\$	No. of Units	\$	\$	
<u>1. Total</u>						
1948	189	670,991	179	622,906	62,291	10.0
1949	123	586,513	118	541,709	54,171	10.0
1950	129	427,909	116	383,459	38,346	10.0
1951	229	454,145	209	425,371	42,537	10.0
1952	406	300,259	395	276,408	27,644	10.0
1953(b)	219	557,804	213	492,002	49,310	10.0
1954	39	290,829	38	288,498	28,850	10.0
1955	24	216,843	23	212,117	21,217	10.0
1956	64	313,358	60	301,610	30,161	10.0
1957	23	127,433	23	127,004	12,865	10.1
1958	10	66,029	8	41,788	4,179	10.0
1959	15	121,213	15	121,002	12,510	10.3
1960	6	75,336	6	74,892	7,493	10.0
1961	7	93,933	7	93,766	9,389	10.0
1962	8	81,940	8	80,646	9,546	11.8
1963	3	41,018	3	41,018	4,100	10.0

2. United Kingdom

1948	10	48,085	-	-	-	-
1949	5	44,804	-	-	-	-
1950	13	44,450	-	-	-	-
1951	20	28,774	-	-	-	-
1952	11	23,851	-	-	-	-
1953(b)	5	65,628	-	-	-	-
1954	1	2,331	-	-	-	-
1955	1	4,726	-	-	-	-
1956	4	11,748	-	-	-	-
1957	1	9,156	1	8,727	873	10.0
1958	2	23,913	-	-	-	-
1959	-	211	-	-	-	-
1960	-	444	-	-	-	-
1961	-	167	-	-	-	-
1962	-	1,348	-	54	8	14.8
1963	-	-	-	-	-	-

Table 6  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Dutiable Imports</u>		<u>Duty</u> <u>Collected</u>	<u>Duty as</u> <u>p.c. of</u> <u>Dutiable</u> <u>Value</u>
	No. of Units	\$	No. of Units	\$	\$	
<u>3. United States</u>						
1948	177	618,277	177	618,277	61,828	10.0
1949	116	537,469	116	537,469	53,747	10.0
1950	109	347,020	109	347,020	34,702	10.0
1951	201	396,203	201	396,203	39,620	10.0
1952	386	241,271	386	241,271	24,131	10.0
1953(b)	209	473,210	208	473,036	47,315	10.0
1954	37	279,820	37	279,820	27,982	10.0
1955	23	212,002	23	212,002	21,200	10.0
1956	59	289,384	59	289,384	28,938	10.0
1957	21	114,869	21	114,869	11,487	10.0
1958	8	42,116	8	41,788	4,179	10.0
1959	12	112,798	12	112,798	11,280	10.0
1960	6	74,892	6	74,892	7,493	10.0
1961	5	77,750	5	77,750	7,784	10.0
1962	4	73,710	4	73,710	8,815	12.0
1963	2	38,586	2	38,586	3,857	10.0

(a) Beginning in 1964, classified under s.c. 526-08 (see table 20)

(b) Prior to 1954 class 5514 was: "Flat bed printing presses, to print sheets of a size 25 x 38 inches or larger, and complete parts thereof; machines designed to fold or sheet-feed paper or card-board, and complete parts thereof"



Table 7

Imports: Typecasting and typesetting machines and parts thereof, for  
use in printing offices, s.c. 5516<sup>(a)</sup>

Tariff item 41215-1

<u>Year</u>	<u>Total</u> \$	<u>United Kingdom</u> \$	<u>United States</u> \$
1948	1,879,074	182	1,878,892
1949	2,280,869	2,061	2,278,808
1950	1,764,946	18,149	1,745,787
1951	2,437,297	10,825	2,426,472
1952	1,579,688	4,246	1,575,442
1953	2,427,671	2,982	2,417,766
1954	2,271,301	1,984	2,266,434
1955	1,979,278	5,218	1,973,284
1956	2,740,029	5,532	2,731,573
1957	2,463,284	2,370	2,445,048
1958	2,326,243	11,570	2,285,556
1959	2,602,874	25,821	2,555,909
1960	2,671,647	27,028	2,633,080
1961	2,542,221	31,678	2,506,079
1962	2,767,835	23,091	2,737,014
1963	3,127,810	91,194	3,029,558
1964	4,410,588	72,964	4,301,301

(a) Beginning in 1964, re-numbered s.c. 526-20

Table 8

Imports: Offset presses; lithographic presses; printing presses,  
n.o.p.; and parts, s.c. 5515<sup>(a)</sup>

Tariff item 41220-1

Year	Total Imports		Dutiable Imports		Duty Collected	Duty as p.c. of Dutiable Value
	No. of	\$	No. of	\$		
	Units		Units			
<u>1. Total</u>						
1948	6,878	6,083,506	5,232	4,765,684	482,115	10.1
1949	6,425	5,858,510	4,484	5,023,851	502,411	10.0
1950	8,428	5,926,428	5,311	4,387,899	438,810	10.0
1951	8,445	6,379,681	4,949	5,179,971	518,207	10.0
1952	7,532	4,930,186	4,966	3,866,041	386,620	10.0
1953	8,407	6,418,635	5,235	5,210,290	521,433	10.0
1954	7,639	8,411,269	5,154	7,458,368	745,799	10.0
1955	10,171	8,392,946	6,761	7,127,280	713,017	10.0
1956	17,970	9,282,565	14,221	7,655,536	765,599	10.0
1957	13,743	10,169,617	9,226	8,882,050	888,912	10.0
1958	13,081	10,074,950	7,892	8,695,662	877,007	10.1
1959	17,287	11,438,233	11,108	10,209,091	1,028,955	10.1
1960	19,564	12,123,663	10,526	10,684,647	1,071,827	10.0
1961	17,321	14,717,347	12,463	12,945,592	1,301,191	10.1
1962	16,943	14,827,367	13,356	13,339,057	1,528,410	11.5
1963	19,702	14,623,644	14,938	12,829,900	1,286,708	10.0
<u>2. United Kingdom</u>						
1948	1,646	1,035,495	1	233	23	9.9
1949	1,971	836,881	30	2,222	222	10.0
1950	3,119	1,563,924	2	25,864	2,587	10.0
1951	3,494	1,183,026	-	-	-	-
1952	2,541	1,057,968	-	-	-	-
1953	3,062	1,150,586	-	-	-	-
1954	2,450	938,945	-	331	33	10.0
1955	3,364	1,213,134	10	2,910	291	10.0
1956	3,692	1,476,140	-	558	56	10.0
1957	4,442	1,226,323	-	-	-	-
1958	5,061	1,257,395	1	598	60	10.0
1959	6,091	1,174,068	1	9,825	983	10.0
1960	8,470	1,310,979	-	3,855	385	10.0
1961	4,787	1,652,921	2	14,300	1,430	10.0
1962	5,342	1,999,403	1,956	746,893	40,324	5.4
1963	4,532	1,438,789	26	14,896	1,489	10.0

Table 8  
(Cont'd)

Year	Total Imports		Dutiable Imports		Duty Collected	Duty as p.c. of Dutiable Value
	No. of Units	\$	No. of Units	\$		
	<u>3. Germany<sup>(b)</sup></u>					
1948	95	123,112	95	123,112	17,851	14.5
1949	91	117,619	91	117,619	11,762	10.0
1950	122	160,976	122	160,976	16,098	10.0
1951	193	246,336	193	246,336	24,829	10.1
1952	136	283,637	136	283,637	28,364	10.0
1953	232	463,959	232	463,959	46,396	10.0
1954	188	468,958	188	468,840	46,884	10.0
1955	401	633,902	401	633,902	63,533	10.0
1956	286	797,099	284	787,335	78,734	10.0
1957	288	756,766	288	756,766	75,821	10.0
1958	354	957,078	350	943,452	95,291	10.1
1959	354	1,465,737	354	1,465,737	146,582	10.0
1960	680	1,172,179	679	1,167,278	116,628	10.0
1961	769	1,323,979	769	1,323,979	132,411	10.0
1962	415	1,241,267	413	1,223,261	144,222	11.8
1963	751	1,688,894	743	1,632,396	163,011	10.0

4. Sweden

1948	-	-	-	-	-	-
1949	2	51,090	2	51,090	5,109	10.0
1950	10	38,494	10	38,494	3,849	10.0
1951	19	92,966	19	92,966	9,297	10.0
1952	20	91,982	20	91,982	9,198	10.0
1953	70	186,322	70	186,322	18,632	10.0
1954	118	86,985	118	86,985	8,699	10.0
1955	51	193,175	51	193,175	19,317	10.0
1956	97	116,182	97	116,182	11,618	10.0
1957	49	164,882	49	164,882	16,488	10.0
1958	95	183,383	95	183,383	18,338	10.0
1959	80	139,155	80	139,069	13,907	10.0
1960	315	177,012	167	173,075	17,308	10.0
1961	89	219,648	88	213,983	21,401	10.0
1962	188	291,995	188	291,995	34,650	11.9
1963	43	204,101	42	197,545	19,638	9.9



Table 8  
(Cont'd)

Year	Total Imports		Dutiable Imports		Duty Collected	Duty as p.c. of Dutiable Value
	No. of Units	\$	No. of Units	\$		

5. Switzerland

1948-49	-	-	-	-	-	-
1950	1	782	1	782	78	10.0
1951	1	13,624	1	13,624	1,362	10.0
1952	5	17,781	5	17,781	1,778	10.0
1953	1	103	1	103	10	9.7
1954	3	23,415	3	23,415	2,342	10.0
1955	29	41,770	29	41,770	4,177	10.0
1956	11	90,963	11	90,963	9,096	10.0
1957	12	57,458	12	57,458	5,746	10.0
1958	18	244,484	18	244,484	24,448	10.0
1959	16	219,726	16	219,726	21,973	10.0
1960	6	13,929	6	13,929	1,393	10.0
1961	8	142,264	8	142,264	14,229	10.0
1962	12	92,212	12	92,212	9,438	10.2
1963	7	57,823	7	57,823	5,752	9.9

6. United States

1948	5,065	4,897,923	5,064	4,615,363	461,543	10.0
1949	4,299	4,840,701	4,299	4,840,701	484,096	10.0
1950	4,988	4,109,571	4,988	4,109,102	410,930	10.0
1951	4,518	4,778,440	4,516	4,761,756	476,191	10.0
1952	4,587	3,391,378	4,562	3,385,201	338,536	10.0
1953	4,743	4,475,516	4,634	4,420,194	441,954	10.0
1954	4,713	6,760,746	4,678	6,746,577	674,619	10.0
1955	5,909	6,175,401	5,853	6,119,959	612,023	10.0
1956	13,502	6,485,009	13,448	6,357,402	635,785	10.0
1957	8,540	7,744,103	8,466	7,696,701	769,678	10.0
1958	6,932	7,077,102	6,808	6,990,808	699,132	10.0
1959	10,066	8,056,805	9,977	7,991,992	799,902	10.0
1960	9,000	9,095,929	8,587	8,975,118	900,041	10.0
1961	10,271	10,808,243	10,218	10,684,247	1,074,499	10.1
1962	10,006	10,717,317	9,875	10,507,758	1,241,438	11.8
1963	13,107	10,723,787	12,928	10,434,755	1,047,590	10.0

(a) Beginning in 1964, classified mainly under the statistical classes outlined in table 20

(b) Beginning in 1952, West Germany only

Table 9

Imports: Typemaking accessories for printing presses, and parts,  
s.c. 5517<sup>(a)</sup>

Tariff item 41220-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1948	84,135	78,090	7,809	10.0
1949	67,553	65,202	6,558	10.1
1950	127,482	123,212	12,321	10.0
1951	85,326	79,527	7,953	10.0
1952	81,135	77,970	7,797	10.1
1953	143,789	137,727	13,773	10.0
1954	133,608	131,192	13,119	10.0
1955	93,287	92,258	9,226	10.0
1956	96,285	94,752	9,475	10.0
1957	61,815	59,115	5,912	10.0
1958	69,391	68,214	6,821	10.0
1959	51,892	50,538	5,054	10.0
1960	58,739	53,380	5,340	10.0
1961	83,114	77,387	7,747	10.0
1962	84,412	82,093	9,720	11.8
1963	59,750	57,538	5,820	10.1
<u>2. United States</u>				
1948	78,090	78,090	7,809	10.0
1949	65,202	65,202	6,558	10.1
1950	123,212	123,212	12,321	10.0
1951	79,527	79,527	7,953	10.0
1952	77,970	77,970	7,797	10.0
1953	138,150	137,727	13,773	10.0
1954	131,192	131,192	13,119	10.0
1955	92,109	92,109	9,211	10.0
1956	80,969	80,969	8,097	10.0
1957	58,789	58,789	5,879	10.0
1958	68,121	68,121	6,812	10.0
1959	50,182	50,182	5,018	10.0
1960	53,421	53,241	5,326	10.0
1961	76,658	76,658	7,674	10.0
1962	78,792	78,792	9,545	12.1
1963	55,585	54,947	5,562	10.1

(a) Beginning in 1964, classified mostly under s.c. 526-24  
(see table 20)

Table 10

Imports: Plates, rolls and cylinders engraved on wood, steel or other metal, and transfers taken from the same, n.o.p., engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates, s.c. 6191(a)

Tariff item 47200-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1948	440,961	440,961	65,747	14.9
1949	488,350	488,350	73,017	15.0
1950	654,784	654,784	96,026	14.7
1951	750,013	750,013	109,442	14.6
1952	584,021	584,021	86,869	14.9
1953	691,239	691,239	103,211	14.9
1954	871,540	871,540	129,638	14.9
1955	854,353	854,353	127,245	14.9
1956	881,177	881,177	131,044	14.9
1957	971,143	971,143	144,608	14.9
1958	987,932	987,932	147,564	14.9
1959	1,262,003	1,261,903	188,700	15.0
1960	1,379,037	1,368,178	204,416	14.9
1961	1,641,349	1,638,695	244,865	14.9
1962	1,874,158	1,870,934	279,618	14.9
1963	1,812,554	1,800,191	269,675	15.0
1964	1,713,144	1,709,107	254,240	14.9
<u>2. United States</u>				
1948	433,490	433,490	65,024	15.0
1949	481,692	481,692	72,282	15.0
1950	607,574	607,574	91,141	15.0
1951	688,745	688,745	103,311	15.0
1952	567,408	567,408	85,143	15.0
1953	681,741	681,741	102,261	15.0
1954	846,577	846,577	126,992	15.0
1955	825,936	825,936	123,965	15.0
1956	849,842	849,842	127,477	15.0
1957	935,471	935,471	140,319	15.0
1958	953,156	953,156	142,972	15.0
1959	1,236,849	1,236,749	185,520	15.0
1960	1,347,430	1,336,571	200,513	15.0
1961	1,605,038	1,602,384	240,599	15.0
1962	1,835,969	1,832,745	274,802	15.0
1963	1,775,038	1,763,129	265,046	15.0
1964	1,648,090	1,644,053	245,271	14.9

(a) Beginning in 1964, re-numbered s.c. 526-48



Table 11

Imports: Plates for printing in two or more colours, including electrotypes, nickeltypes and all engravings on steel or other metal, for use exclusively in printing, n.o.p.,  
s.c. 6192(a)

Tariff item 47300-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1948	236,179	233,040	34,961	15.0
1949	268,237	266,470	39,971	15.0
1950	290,497	286,613	42,995	15.0
1951	292,547	284,321	42,652	15.0
1952	256,910	254,432	38,164	15.0
1953	228,286	221,522	33,228	15.0
1954	248,441	239,380	35,915	15.0
1955	206,577	202,091	30,313	15.0
1956	214,743	206,291	30,945	15.0
1957	220,488	196,863	29,529	15.0
1958	204,129	184,725	27,711	15.0
1959	167,519	159,249	23,886	15.0
1960	195,327	189,591	28,455	15.0
1961	229,924	216,303	32,469	15.0
1962	234,432	212,491	31,893	15.0
1963	243,595	233,275	34,970	15.0
1964	180,456	178,623	26,633	14.9
<u>2. United States</u>				
1948	233,040	233,040	34,961	15.0
1949	266,078	266,078	39,912	15.0
1950	286,341	286,341	42,954	15.0
1951	281,467	281,467	42,224	15.0
1952	251,503	251,503	37,725	15.0
1953	217,663	217,663	32,649	15.0
1954	238,882	238,407	35,769	15.0
1955	201,373	201,284	30,192	15.0
1956	206,515	203,799	30,571	15.0
1957	195,966	195,966	29,394	15.0
1958	182,970	182,860	27,431	15.0
1959	158,640	157,595	23,638	15.0
1960	184,991	184,559	27,701	15.0
1961	214,786	207,137	31,094	15.0
1962	219,752	203,590	30,558	15.0
1963	230,791	230,253	34,519	15.0
1964	177,860	177,860	26,520	14.9

(a) Beginning in 1964, re-numbered s.c. 526-50

Table 12

Imports: Printing plates of all kinds for periodical publications enjoying second-class mailing privileges, the pages of which are regularly bound, wire-stitched or otherwise fastened together, and matrices, metal bases and copper shells therefore, but not to include printing plates and other articles covered by tariff item 47500-1, s.c. 6200<sup>(a)</sup>

Tariff item 47305-1

<u>Year</u>	<u>Total Imports</u> \$	<u>United Kingdom</u> \$	<u>United States</u> \$
1948	475,909	4,064	471,845
1949	462,090	2,935	459,155
1950	562,172	4,440	557,481
1951	458,394	2,870	453,972
1952	408,664	3,622	405,042
1953	421,264	6,459	414,805
1954	502,381	4,669	494,715
1955	496,798	5,474	480,003
1956	423,257	2,515	419,653
1957	462,932	2,460	459,749
1958	447,464	2,429	444,776
1959	477,048	2,222	471,862
1960	581,230	1,400	572,102
1961	575,768	2,489	570,171
1962	478,449	582	470,722
1963	468,412	857	466,856
1964	376,979	781	365,746

(a) Beginning in 1964, re-numbered s.c. 526-51

Table 13

Imports: Stereotypes, electrotypes and celluloids for almanacs, calendars, illustrated pamphlets, newspaper or other advertisements, n.o.p., and matrices or copper shells for such stereotypes, electrotypes and celluloids, s.c. 6197<sup>(a)</sup>

Tariff item 47400-1

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>	<u>Dutiable Imports</u>	<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
	<u>sq. in.</u>	<u>\$</u>	<u>\$/sq. in.</u>	<u>\$</u>	<u>\$</u>	
<u>1. Total</u>						
1948	3,221,360	177,883	.0552	177,883	40,304	22.7
1949	3,182,882	171,622	.0539	171,622	39,729	23.1
1950	3,349,959	204,939	.0612	204,939	41,717	20.4
1951	2,798,172	155,131	.0554	155,131	31,740	20.5
1952	3,346,019	173,154	.0517	173,154	33,460	19.3
1953	3,420,000	181,161	.0530	181,146	34,198	18.9
1954	4,131,637	161,546	.0391	161,546	41,316	25.6
1955	4,319,897	180,789	.0419	180,789	43,199	23.9
1956	4,016,596	144,204	.0359	144,204	40,166	27.9
1957	2,945,821	133,057	.0452	133,057	29,458	22.1
1958	2,952,268	130,656	.0443	130,656	29,523	22.6
1959	3,170,725	121,159	.0382	121,159	31,707	26.2
1960	2,767,059	116,111	.0420	116,111	27,689	23.8
1961	1,680,718	99,138	.0590	98,937	16,822	17.0
1962	1,628,243	95,390	.0586	95,246	16,334	17.1
1963	1,214,859	74,283	.0611	74,283	12,201	16.4
<u>2. United States</u>						
1948	3,207,321	176,421	.0550	176,421	40,146	22.8
1949	3,163,376	170,342	.0538	170,342	39,542	23.2
1950	3,290,512	202,592	.0615	202,592	41,152	20.3
1951	2,796,055	154,355	.0552	154,355	31,719	20.5
1952	3,333,536	172,917	.0519	172,917	33,335	19.3
1953	3,418,874	180,874	.0529	180,859	34,183	18.9
1954	4,103,231	160,599	.0391	160,599	41,032	25.5
1955	4,305,647	179,036	.0416	179,036	43,056	24.0
1956	4,002,517	140,286	.0350	140,286	40,025	28.5
1957	2,910,864	126,925	.0436	126,925	29,109	22.9
1958	2,921,780	126,407	.0433	126,407	29,218	23.1
1959	3,125,022	115,884	.0371	115,884	31,250	27.0
1960	2,704,622	110,264	.0408	110,264	27,063	24.5
1961	1,631,934	97,016	.0594	96,815	16,333	16.9
1962	1,627,579	94,813	.0583	94,669	16,327	17.2
1963	1,211,717	73,529	.0607	73,529	12,169	16.5

<sup>(a)</sup> Beginning in 1964, classified under s.c. 526-55 (see table 20)



Table 14

Imports: Stereotypes, electrotypes, rubber plates and celluloids of books, and bases and matrices and copper shells for the same, whether composed wholly or in part of metal or celluloid; positive and negative films of periodical publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues,  
s.c. 6196<sup>(a)</sup>

## Tariff item 47500-1

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>
	sq. in.	\$	\$/sq. in.
<u>1. Total</u>			
1948	4,696,397	208,942	.044
1949	7,496,310	276,362	.037
1950 <sup>(b)</sup>	11,901,378	329,742	.028
1951	4,148,043	214,396	.052
1952	2,350,130	184,604	.079
1953	1,965,792	208,912	.106
1954	2,717,177	193,851	.071
1955	2,304,000	174,713	.076
1956	3,967,130	258,657	.065
1957	4,524,914	309,106	.068
1958	4,482,492	272,968	.061
1959	4,672,178	303,721	.065
1960	5,628,404	290,912	.052
1961	5,993,734	288,103	.048
1962	9,310,911	383,805	.041
1963	9,511,130	428,645	.045
1964	..	224,603	-
<u>2. United Kingdom</u>			
1948	90,110	5,536	.061
1949	40,980	4,355	.106
1950 <sup>(b)</sup>	1,081	299	.277
1951	1,209	1,115	.922
1952	6,260	172	.027
1953	300	89	.297
1954	689,129	3,250	.005
1955	558	137	.246
1956	245,177	2,198	.009
1957	86,655	12,222	.141
1958	30,331	3,151	.104
1959	74,597	4,513	.060
1960	99,216	5,260	.053
1961	67,941	5,012	.074
1962	609,066	11,385	.019
1963	455,557	45,803	.101
1964	..	19,823	-

Table 14  
(Cont'd)

<u>Year</u>	<u>Total Imports</u>		<u>Unit Value</u>
	sq. in.	\$	\$/sq. in.
<u>3. United States</u>			
1948	4,606,287	203,406	.044
1949	7,201,410	254,678	.035
1950	11,900,297	329,443	.028
1951(b)	4,146,834	213,281	.051
1952	2,343,870	184,432	.079
1953	1,965,492	208,823	.106
1954	2,028,048	190,601	.094
1955	2,291,633	173,614	.076
1956	3,720,103	256,311	.069
1957	4,431,720	296,322	.067
1958	4,424,538	266,342	.060
1959	4,543,932	295,598	.065
1960	5,516,601	283,320	.051
1961	5,920,148	281,390	.048
1962	8,670,862	367,485	.042
1963	8,749,840	370,369	.042
1964	..	200,287	-

(a) Beginning in 1964, re-numbered s.c. 526-53

(b) Prior to 1951 class 6196 was: "Stereotypes, electrotypes and celluloids of books, and bases and matrices and copper shells for the same, whether composed wholly or in part of metal or celluloid; positive and negative films of periodical publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues"

Table 15

Imports: Stereotypes, electrotypes and celluloids and bases for the same, composed wholly or partly of metal or celluloid, n.o.p., and copper shells for such stereotypes, electrotypes and celluloids, s.c. 6194(a)

Tariff item 47505-1

Year	Total Imports		Unit Value \$/sq. in.	Dutiable Imports \$	Duty Collected \$	Duty as p.c. of Dutiable Value
	sq. in.	\$				
1. Total						
1948	224,091	46,877	0.209	46,877	295	0.6
1949	438,333	60,794	0.139	60,794	549	0.9
1950	220,147	59,320	0.269	59,320	275	0.5
1951	232,024	52,771	0.227	52,771	292	0.6
1952	130,667	27,400	0.210	27,400	164	0.6
1953	134,561	35,132	0.261	35,132	168	0.5
1954	161,150	28,983	0.180	28,983	201	0.7
1955	176,655	56,183	0.318	56,183	221	0.4
1956	141,834	30,660	0.216	30,660	177	0.6
1957	294,062	31,041	0.106	31,041	368	1.2
1958	149,313	26,000	0.174	26,000	187	0.7
1959	283,164	40,565	0.143	40,565	354	0.9
1960	204,429	28,739	0.141	28,421	255	0.9
1961	1,121,280	32,403	0.029	32,403	1,402	4.3
1962	255,287	23,366	0.092	23,366	321	1.4
1963	101,626	22,849	0.225	22,849	137	0.6
2. United States						
1948	224,091	46,877	0.209	46,877	295	0.6
1949	438,333	60,794	0.139	60,794	549	0.9
1950	220,147	59,320	0.269	59,320	275	0.5
1951	232,024	52,771	0.227	52,771	292	0.6
1952	130,667	27,400	0.210	27,400	164	0.6
1953	134,561	35,132	0.261	35,132	168	0.5
1954	159,070	28,771	0.181	28,771	199	0.7
1955	175,216	56,084	0.320	56,084	219	0.4
1956	140,817	30,596	0.217	30,596	176	0.6
1957	293,297	30,934	0.105	30,934	367	1.2
1958	149,313	26,000	0.174	26,000	187	0.7
1959	280,790	40,148	0.143	40,148	351	0.9
1960	204,316	28,353	0.139	28,035	255	0.9
1961	1,121,280	32,403	0.029	32,403	1,402	4.3
1962	255,287	23,366	0.092	23,366	321	1.4
1963	101,626	22,849	0.225	22,849	137	0.6

(a) Beginning in 1964, classified under s.c. 526-55 (see table 20)



Table 16

Imports: Matrices for stereotypes, electrotypes and celluloids, and matrices for news pictures, enumerated in tariff item 47505-1, s.c. 6195<sup>(a)</sup>

Tariff items 47510-1 and 47525-1

Year	Total Imports		Unit Value	Dutiable Imports	Duty Collected	Duty as p.c. of Dutiable Value
	sq. in.	\$	\$/sq. in.	\$	\$	
<u>1. Total</u>						
1948	5,879,759	13,983	0.002	10,782	26,198	243.0
1949	7,456,970	27,861	0.004	8,573	20,533	239.5
1950	11,354,101	33,806	0.003	11,696	25,018	213.9
1951	8,323,370	33,930	0.004	10,481	18,026	172.0
1952	7,243,063	23,575	0.003	9,633	19,487	202.3
1953	4,024,812	14,781	0.004	5,209	9,531	183.0
1954	2,809,921	7,988	0.003	4,611	8,647	187.5
1955	2,385,833	10,941	0.005	8,933	9,811	109.8
1956	1,933,337	11,429	0.006	6,396	8,609	134.6
1957	1,015,835	8,834	0.009	5,409	4,630	85.6
1958	168,505	4,693	0.028	1,594	493	30.9
1959	406,564	9,856	0.024	6,138	1,568	25.5
1960	524,492	15,271	0.029	13,364	2,185	16.3
1961	257,605	14,464	0.056	8,999	900	10.0
1962	211,295	11,325	0.054	10,287	1,022	9.9
1963	130,967	5,563	0.042	5,116	641	12.5
<u>2. United States</u>						
1948	5,804,559	13,795	0.002	10,782	26,198	243.0
1949	7,312,140	27,363	0.004	8,075	19,809	245.3
1950	11,233,153	32,339	0.003	11,408	24,513	214.9
1951	8,315,120	33,820	0.004	10,371	17,985	173.4
1952	7,243,063	23,575	0.003	9,633	19,487	202.3
1953	4,024,812	14,781	0.004	5,209	9,531	183.0
1954	2,799,921	7,904	0.003	4,611	8,647	187.5
1955	2,385,833	10,941	0.005	8,933	9,811	109.8
1956	1,933,337	11,429	0.006	6,396	8,609	134.6
1957	1,015,835	8,834	0.009	5,409	4,630	85.6
1958	168,505	4,693	0.028	1,594	493	30.9
1959	384,595	9,682	0.025	5,964	1,458	24.4
1960	524,492	15,271	0.029	15,271	2,185	14.3
1961	257,605	14,464	0.056	8,999	900	10.0
1962	211,295	11,325	0.054	10,287	1,022	9.9
1963	130,967	5,563	0.042	5,116	641	12.5

(a) Beginning in 1964, classified under s.c. 526-55 (see table 20)

Table 17

Imports: Plates and electrotypes of metal for printing music, and printing plates, transfers and films, for printing school books, s.c. 6193(a)

---

Tariff items 47515-1 and 47520-1

<u>Year</u>	<u>Total Imports</u> \$	<u>United Kingdom</u> \$	<u>United States</u> \$	<u>Netherlands</u> \$	<u>Austria</u> \$
1948	3,925	-	3,925	-	-
1949	9,467	-	9,467	-	-
1950	28,773	-	28,773	-	-
1951	43,232	-	43,232	-	-
1952	65,435	-	65,435	-	-
1953	46,162	-	44,408	-	1,754
1954	118,773	-	118,773	-	-
1955	24,751	179	24,402	170	-
1956	32,767	-	32,543	224	-
1957	178,334	-	177,237	1,097	-
1958	37,075	-	33,968	3,107	-
1959	47,576	-	43,493	4,083	-
1960	48,449	6,498	37,201	4,750	-
1961	34,048	4,024	27,282	2,742	-
1962	52,715	500	49,654	-	-
1963	90,780	1,110	89,233	437	-

(a) Beginning in 1964, classified under s.c. 526-55 (see table 20)

Table 18

Imports: Blankets or blanketing for printing presses, not made in  
Canada, s.c. 3552(a)

Tariff item 53415-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1948	262,737	248,243	12,412	5.0
1949	261,126	244,455	12,225	5.0
1950	364,626	350,422	17,521	5.0
1951	503,038	479,142	23,957	5.0
1952	303,576	292,479	14,624	5.0
1953	374,858	356,942	17,847	5.0
1954	369,359	339,147	16,953	5.0
1955	455,484	438,562	21,928	5.0
1956	501,840	473,648	23,681	5.0
1957	570,565	532,739	26,637	5.0
1958	562,032	515,023	25,751	5.0
1959	629,689	574,877	28,876	5.0
1960	642,593	598,112	29,965	5.0
1961	767,145	698,217	35,013	5.0
1962	784,774	699,182	35,234	5.0
1963	848,600	701,548	35,249	5.0
1964	865,618	727,669	36,538	5.0
<u>2. United Kingdom</u>				
1948	14,494	-	-	-
1949	16,671	-	-	-
1950	14,204	-	-	-
1951	23,896	-	-	-
1952	11,097	-	-	-
1953	17,916	-	-	-
1954	30,212	-	-	-
1955	16,922	-	-	-
1956	28,192	-	-	-
1957	37,826	-	-	-
1958	47,009	-	-	-
1959	54,812	-	-	-
1960	44,481	-	-	-
1961	68,761	-	-	-
1962	82,954	-	-	-
1963	141,643	1,458	219	15.0
1964	132,141	816	40	4.9



Table 18  
(Cont'd)

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>3. United States</u>				
1948	248,243	248,243	12,412	5.0
1949	244,455	244,455	12,225	5.0
1950	350,422	350,422	17,521	5.0
1951	479,142	479,142	23,957	5.0
1952	292,479	292,479	14,624	5.0
1953	356,942	356,942	17,847	5.0
1954	339,147	339,147	16,953	5.0
1955	432,803	432,803	21,640	5.0
1956	447,755	447,755	22,386	5.0
1957	512,677	512,677	25,634	5.0
1958	501,475	501,475	25,073	5.0
1959	564,802	564,802	28,278	5.0
1960	576,900	576,900	28,904	5.0
1961	661,597	661,430	33,185	5.0
1962	655,721	653,083	32,928	5.0
1963	676,943	670,076	33,524	5.0
1964	701,907	695,283	34,797	5.0
<u>4. Puerto Rico</u>				
1949-54	-	-	-	-
1955	5,319	5,319	266	5.0
1956	11,432	11,432	572	5.0
1957	15,060	15,060	753	5.0
1958	10,073	10,073	504	5.0
1959	9,280	9,280	558	6.0
1960	19,160	19,160	959	5.0
1961	35,621	35,621	1,770	5.0
1962	43,442	43,442	2,173	5.0
1963	28,517	28,517	1,430	5.0
1964	24,697	24,697	1,316	5.3

(a) Beginning in 1964, re-numbered s.c. 526-46, most of which covers the former class

Table 19

Imports: Moulding material of synthetic rubber and wax with a backing of aluminum not over .006 inches in thickness for the manufacture of electrotypes, s.c. 6201(a)

Tariff item 66000-1

<u>Year</u>	<u>Total Imports</u> \$	<u>Dutiable Imports</u> \$	<u>Duty Collected</u> \$	<u>Duty as p.c. of Dutiable Value</u>
<u>1. Total</u>				
1952 <sup>(b)</sup>	17,008	17,008	1,276	7.5
1953	23,618	23,618	1,770	7.5
1954	21,249	21,249	1,594	7.5
1955	29,902	29,858	2,240	7.5
1956	34,334	34,334	2,575	7.5
1957	33,166	31,593	2,370	7.5
1958	25,155	25,155	1,887	7.5
1959	23,809	23,809	1,786	7.5
1960	24,216	24,216	1,814	7.5
1961	24,210	24,210	1,814	7.5
1962	19,949	19,949	1,509	7.6
1963	11,187	11,187	844	7.5
<u>2. United States</u>				
1952 <sup>(b)</sup>	17,008	17,008	1,276	7.5
1953	23,618	23,618	1,770	7.5
1954	21,249	21,249	1,594	7.5
1955	29,902	29,858	2,240	7.5
1956	34,334	34,334	2,575	7.5
1957	31,593	31,593	2,370	7.5
1958	25,155	25,155	1,887	7.5
1959	23,809	23,809	1,786	7.5
1960	24,216	24,216	1,814	7.5
1961	24,210	24,210	1,814	7.5
1962	19,949	19,949	1,509	7.6
1963	11,187	11,187	844	7.5

(a) Beginning in 1964, classified under s.c. 526-55

(b) s.c. 6201 established May 1, 1952

Table 20

Imports: 1964

<u>Total Imports</u>		<u>Dutiable Imports</u>		<u>Duty Collected</u>	<u>Duty as p.c. of Dutiable Value</u>
<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>	<u>\$</u>	
<u>No.</u>	<u>\$</u>	<u>No.</u>	<u>\$</u>		
<u>Composing room machinery equipment and parts n.e.s., s.c. 526-24(a)</u>					
Usual tariff items: 34000-1, 41205-1 and 41220-1					
Total	-	1,025,743	-	725,103	67,073 9.3
U.K.	-	6,675	-	3,839	374 9.7
U.S.	-	1,012,164	-	718,965	66,309 9.2
W. Germany	-	2,957	-	1,901	323 17.0

(a) Prior to 1964, classified mainly under s.c. 5511, 5517 and 6199

Printing presses and parts n.e.s., s.c. 526-16(a)

Usual tariff items: 41200-1, 41205-1 and 41220-1

Total	2,847	3,917,939	1,984	3,144,208	316,036	10.1
U.K.	789	293,289	-	1,307	130	9.9
U.S.	1,877	3,114,238	1,805	2,668,923	268,900	10.1
W. Germany	137	392,044	135	357,696	35,429	9.9

(a) Prior to 1964, classified mainly under s.c. 5511 and 5515

Offset lithographing presses and parts, s.c. 526-12(a)

Usual tariff items: 41200-1, 41205-1 and 41220-1

Total	387	8,784,031	333	7,210,185	729,274	10.1
U.K.	32	351,706	1	70,836	7,083	10.0
U.S.	178	5,863,485	159	4,633,151	469,281	10.1
W. Germany	111	1,780,013	108	1,732,137	174,057	10.0

(a) Prior to 1964, classified mainly under s.c. 5511 and 5515



Table 20  
(Cont'd)Imports: 1964Duty as  
p.c. of  
Dutiable  
Value

<u>Total Imports</u>	<u>Dutiable Imports</u>	<u>Duty</u>	
<u>Quantity</u>	<u>Value</u>	<u>Collected</u>	
No.	\$	\$	
No.	\$		

Flat bed cylinder presses and parts, s.c. 526-08(a)

Usual tariff items: 41200-1, 41210-1 and 41220-1

Total	17	175,237	17	171,607	17,051	9.9
U.K.	-	152	-	-	-	-
U.S.	3	75,890	3	72,412	7,224	10.0
W. Germany	14	99,195	14	99,195	9,827	9.9

(a) Prior to 1964, classified mainly under s.c. 5511, 5514 and 5515

Rotary printing presses and parts, s.c. 526-04(a)

Usual tariff items: 41200-1 and 41220-1

Total	55	7,594,502	25	1,036,213	104,975	10.1
U.K.	5	3,390,224	-	135	13	9.6
U.S.	42	4,022,959	20	938,705	95,231	10.1
W. Germany	8	170,120	5	97,373	9,731	10.0

(a) Prior to 1964, classified mainly under s.c. 5513 and 5515

Type foundry and related equipment and parts, s.c. 526-45(a)

Usual tariff items: 41205-1, 41220-1, 41225-1 and 68500-1

Total	-	2,076,225	-	132,952	13,566	10.2
U.K.	-	32,156	-	-	-	-
U.S.	-	1,910,673	-	132,952	13,566	10.2
W. Germany	-	97,574	-	-	-	-

(a) Prior to 1964, classified mainly under s.c. 5511, 5515 and 9208

Table 20  
(Cont'd)Imports: 1964

<u>Imports: 1964</u>						Duty as p.c. of Dutiable Value
<u>Total Imports</u>		<u>Dutiable Imports</u>		<u>Duty Collected</u>		
<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>	<u>\$</u>		
<u>No.</u>	<u>\$</u>	<u>No.</u>	<u>\$</u>			
<u>Printing industries machinery and parts n.e.s., s.c. 526-59<sup>(a)</sup></u>						
Usual tariff items: 41205-1, 41210-1, 42605-1, 42701-1 and 42720-1						
Total	-	2,367,175	-	730,649	76,179 10.4	
U.K.	-	139,831	-	5,408	543 10.0	
U.S.	-	2,070,162	-	710,583	74,285 10.5	
W. Germany	-	138,955	-	13,660	1,209 8.9	

(a) Prior to 1964, classified mainly under s.c. 5511, 5512 and 5576

Bookbinding machinery equipment and parts, s.c. 526-69<sup>(a)</sup>

Usual tariff items: 41205-1, 41210-1, 42615-1, 42701-1 and 42720-1

Total	- 1,763,469	-	529,087	45,434		8.6
U.K.	- 27,865	-	2,054	172		8.4
U.S.	- 1,476,295	-	504,512	42,921		8.5
W. Germany	- 43,576	-	8,650	955		11.0

(a) Prior to 1964, classified mainly under s.c. 5511, 5574 and 5576

Plates printing and light articles n.e.s., s.c. 526-55<sup>(a)</sup>

Usual tariff items: various

Total	- 1,803,608	-	1,157,491	246,440		21.3
U.K.	- 47,588	-	10,325	1,310		12.7
U.S.	- 1,730,097	-	1,124,559	240,694		21.4
W. Germany	- 4,881	-	2,035	308		15.1

(a) Prior to 1964, classified under numerous statistical classes

Table 20  
(Cont'd)Imports: 1964

<u>Total Imports</u>		<u>Dutiable Imports</u>		<u>Duty</u>	<u>Duty as</u>
<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>	<u>Collected</u>	<u>p.c. of</u>
No.	\$	No.	\$	\$	Dutiable
					Value
Paper and paperboard converting machinery and parts n.e.s., s.c. 525-60(a)					
Usual tariff items: 41205-1, 42701-1, 42720-1, 44603-1, 44636-1 and 44637-1					
Total	- 13,534,239	-	2,048,238	240,756	11.8
U.K.	- 314,453	-	34,148	3,466	10.1
U.S.	- 11,131,361	-	1,803,206	214,736	11.9
W. Germany	- 1,456,392	-	76,419	7,020	9.2

(a) Prior to 1964, classified mainly under s.c. 5511, 5576 and 5632

Duplicating machines and parts, s.c. 771-40(a)

Usual tariff item: 41220-1

Total	7,054	1,954,448	2,939	1,054,925	105,658	10.0
U.K.	3,848	860,516	67	6,114	598	9.8
U.S.	1,803	946,301	1,780	933,472	93,532	10.0
W. Germany	78	13,321	78	13,321	1,370	10.3

(a) Prior to 1964, classified mainly under s.c. 5515



Table 21

Exports: Printing, bookbinding machinery and parts, s.c. 529-69(a)

<u>Year</u>	<u>Domestic</u> \$	<u>Re-exports</u> \$
	<u>1. Total</u>	
1948	6,208	6,892
1949	553	26,188
1950	844	28,115
1951	1,029	22,263
1952	19,248	22,553
1953	295	27,288
1954	9,484	24,545
1955	-	23,889
1956	7,588	24,258
1957	135	25,994
1958	1,676	34,231
1959	5,073	37,988
1960	5,673	50,390
1961	1,287,725	807,639
1962	2,115,434	1,191,778
1963	3,474,147	1,421,175
1964	3,629,277	..
1965	3,852,561	..
	<u>2. United States</u>	
1948	6,173	6,878
1949	283	26,118
1950	723	28,097
1951	972	21,253
1952	65	17,693
1953	250	27,254
1954	484	24,545
1955	-	23,889
1956	7,588	24,208
1957	135	22,988
1958	1,676	34,231
1959	4,223	37,988
1960	5,673	50,390
1961	1,217,449	642,504
1962	1,989,688	1,018,824
1963	3,356,097	..
1964	3,293,881	..
1965	3,572,680	..

(a) Beginning in 1961, s.c. 529-69 includes former s.c. 5660 and part of s.c. 5710

Table 22

Exports: Electrotypes and stereotypes and engravers' plates,  
s.c. 529-60(a)

<u>Year</u>	<u>Domestic</u> \$	<u>Re-exports</u> \$
	<u>1. Total</u>	
1948	82,133	38,960
1949	51,848	34,032
1950	33,975	23,080
1951	39,279	42,699
1952	67,531	22,028
1953	226,915	58,649
1954	242,291	64,441
1955	287,026	57,577
1956	249,795	80,090
1957	359,027	116,001
1958	285,317	86,824
1959	356,061	123,209
1960	1,035,069	141,515
1961	841,214	164,309
1962	481,298	212,960
1963	352,069	211,800
1964	376,368	..
1965	501,513	..
	<u>2. United States</u>	
1948	72,957	38,168
1949	48,797	33,652
1950	22,984	17,610
1951	34,358	27,916
1952	61,063	18,881
1953	216,526	52,245
1954	234,568	63,682
1955	236,783	54,648
1956	230,281	78,285
1957	339,751	101,831
1958	251,473	82,463
1959	313,963	94,713
1960	998,137	137,155
1961	814,394	161,081
1962	454,846	207,317
1963	317,448	..
1964	328,627	..
1965	472,899	..

(a) Prior to 1961, s.c. 529-60 was the former s.c. 6550





APPENDIX BANALYSIS OF IMPORTS ENTERED UNDER TARIFF ITEM 41205-1Table

- |   |  |
|---|--|
| 1 | Analysis of Imports Entered under Tariff Item 41205-1, and Mechanical Deliveries and Conveyors Entered under Tariff Item 41200-1           |
| 2 | Inventory of Machinery and Equipment Imported under Tariff Item 41205-1 by a Large Newspaper Publisher for Use in Production of Newspapers |

Analysis of Imports Entered Under Tariff  
Item 41205-1, and Mechanical Deliveries or  
Conveyors Entered Under Tariff Item 41200-1(a)

	<u>1961</u> (dollars)	<u>1962</u> (dollars)
<u>Imports under tariff item 41205-1</u>		
Machines and apparatus for making electro- types and stereotypes	264,855	253,952
Engraving machines and apparatus, including photo-engraving apparatus, and other plate- making apparatus, used in the manufacture of printing plates of all kinds	854,493	875,546
Machines and apparatus for graining metal plates	4,756	1,092
Machines and apparatus for sensitizing, grinding or polishing metal plates	5,594	-
Machines and apparatus including cameras and camera equipment, lens, prisms, camera and printing lamps, screens, and vacuum frames, for transferring by photographic processes, or direct, to plates or rolls, for use in lithography, rotogravure and printing	635,564	448,366
Shading apparatus	3,352	10,415
Machines and apparatus for addressing and/or wrapping newspapers, magazines, periodicals, pamphlets and catalogues	68,914	79,295
Machines and apparatus for:		
Embossing or stamping or producing embossed or engraved effects.....	151,892	178,846
Bookbinding	510,932	1,008,458
Stitching	150,757	158,799
Sewing.....	11,138	107,954
Gathering	288,692	367,009
Inserting	7,898	13,427
Bronzing.....	37,898	-
Dusting	34,031	48,608
Creasing	346,146	573,653
Scoring.....	5,973	-
Cutting	1,369,238	1,315,193
Perforating	61,537	143,558
Drilling.....	29,684	14,095
Punching	51,355	147,633
Slitting	519,994	754,984
Rewinding.....	119,565	263,442
Glueing	721,208	632,392
Pasting	8,624	2,450

Table 1 (Cont'd)

	<u>1961</u> (dollars)	<u>1962</u> (dollars)
<u>Imports under tariff item 41205-1</u>		
Machines and apparatus for:		
Gumming.....	101,663	2,208
Waxing	124,191	72,682
Varnishing	15,908	19,926
Carbon coating.....	68,017	-
Patching	53,955	57,000
Numbering	45,522	132,083
Ruling.....	22,360	22,918
Jogging	-	1,320
Sheet Piling	278,925	257,723
Tying.....	39,742	5,252
Bundling	93,330	46,049
Tube-making	145,799	90,712
Eye-letting.....	-	15,153
Staying or stripping	58,750	63,707
Box covering	40,491	14,330

Other Imports Under 41205-1 Which Could not Be  
Ascribed to Particular Parts of the Item

Goods for box making	703,021	820,257
Goods for bag making	813,536	141,448
Goods for envelope making	79,012	217,477
Goods for facial tissue making	-	46,698
Goods for book match making	15,815	10,189
Goods for paper cup making	180,553	114,748
Goods for unspecified converting operations	571,486	186,599

Imports Under Tariff Item 41200-1

Mechanical deliveries or conveyors for use with  
printing presses for newspapers, telephone  
directories or periodical publications

	<u>46,411</u>	<u>74,903</u>
Total identified	9,762,577	9,812,549
Not identified	4,074,530	5,713,204
Total imports	13,837,107	15,525,753

(a) Includes imports entered under tariff item 41225-1, but these are  
believed to be small

Source: Compiled from data collected by D.B.S.



Table 2

Inventory of Machinery and Equipment Imported by a large  
Newspaper Publisher under Tariff Item 41205-1  
for Use in Production of Newspapers

<u>Goods</u>	<u>Remarks</u>	<u>Whether or Not Manufactured in Canada, as reported</u>
Adapters, keyboard	Composing and photo comp.	No
Addressing and labelling equipment	Addressing and labelling newspapers	Not all types
Analysts, colour, black and white	Analyzing and checking printing	No
Boxes - casting	Stereo department	No
- powder	Photo engraving	No
- viewing	Examining transparencies, negatives etc.	Not all types
Bundling machines	Wrapping and bundling newspapers	Not all types
Cabinets, carbon tissue drying		No
Cameras - separation		No
- negative		No
- process		No
- vertical		No
Carbons, photographic		Doubtful
Casting machines - super		No
- plate		No
Chases		No
Check-o-plate machine	Checking plates	No
Coating machine, wax	Photo comp.	No
Colour registration transparency kit	Checking colour registration	No
Converters, colour	Changing spectrum from red through blue/white (for colour printing)	No
Cutters - squaring		Possible
- trimming		Possible
- make up		Yes
Detectors, mat		No
Drilling machines	Used by printers	No
Dryers - plate		No
- mat		No

Table 2  
(Cont'd)

<u>Goods</u>	<u>Remarks</u>	<u>Whether or Not Manufactured in Canada, as reported</u>
Etching correcting machines		No
Etching machines		No
Etching repair machines		No
Face-O-type machines		No
Feeders, wrapping machines		Yes
Filters, screen		Not all types
Finishers, plate shell		No
Flongs, mat moulding	Stereo	No
Fonts, type		..
Formers, mat		No
Frames, printing		Possible
Galleys		No
Gillotines		Not all types
Grinders, roll		Yes
Intertype machines	(Linotype)	No
Intregator	Control of exposure roto etching	No
Joggers		Not all types
Labelling units		Not all types
Lamps, arc, photographic		Not all types
Lathes, cylinder plate polishing grinding		Not all types
Lighting equipment, photographic		Not all types
Lights, exposure		Yes
Linosec equipment tape justification system	Parts	No
Mailing machines		Not all types
Mat moistening machines		No
Material maker	Metal making composing	No
Matchers, masters	Stereo	No
Matrix cleaning machines		No
Mitering machines		No
Moulds		Yes
Perforators, teletype setter		Not all types
Photographic equipment		Not all types

Table 2  
(Cont'd)

<u>Goods</u>	<u>Remarks</u>	<u>Whether or not Manufactured in Canada, as reported</u>
Planers		Not all types
Plater, spot		No
Plating equipment	Plating printing rollers	..
Pots, stereo metal		Possible
Presses, directomat matrix		No
Pro-fonts		No
Pro-type machine	Photo comp.	No
Punches - film		Not all types
- tape paper		" " "
- register		" " "
- plate		" " "
Pyrocan surface heat control	Checking stereo plates	No
Racks, plate drying		Yes
Rectifiers, control plating process		Not all types
Remelters		No
Re-register devices		No
Rewinders - paper		Possible
- paper tape		"
Roasters, dry mat		No
Roll finishing equipment		Not all types
Rolling machines, matrix		No
Routing machines		Not all types
Saws - monorail		Possible
- trimmer		"
- plate		"
- type		"
- lino		"
- glide		"
- jig, combination drilling		"
Scales, focussing		Yes but perhaps not all types
Scorchers, mat	Stereo	No
Screens, line, circular		Perhaps not all types
Shavers, shaving machines - rough		No
- rotary		No
- flat plate		No
- curved plate		No
- trimming		No



Table 2  
(Cont'd)

<u>Goods</u>	<u>Remarks</u>	<u>Whether or Not Manufactured in Canada, as reported</u>
Shears - squaring		Not all types
- trimming		" " "
- hand and vacuum		" " "
- paper and metal		" " "
Sheets, pouring stereo		Possible
Spaceband cleaning machine		No
Stones, polishing	Roto cylinders	Not of type required
Stoves, gas "burning in"		No
- oscillating		Perhaps
Surfacing machine		No
Strip casting machines		No
Stuffing machines		No
Tables - stripping		Perhaps if custom built
- paste up		Perhaps if custom built
- make up		Perhaps if custom built
- viewing		Perhaps if custom built
- jogging		Perhaps if custom built
- mat packing		Perhaps if custom built
- vacuum		No
- bundling		No
- ruling		No
- retouching		Yes
- etching		Yes
Tanks - etching		Yes perhaps custom built
- plating		Yes perhaps custom built
- dip		Yes perhaps custom built
Thermo files	Controlled temperature - humidity for mats	No
Trimmers - disc		No
- saw, monorail		No
- flat mat		No
- curved mat		No
- paper, multi blade		Not of type required

Table 2  
(Cont'd)

<u>Goods</u>	<u>Remarks</u>	Whether or Not Manufactured in Canada, <u>as reported</u>
Troughs - stripping		Yes
- plating		Yes
Turtles		No
Tyers, bundling machines		Not all types
Viewers, printing		No
Whirlers - plate		No
- infra-red		No
Winders & rewinders		Possible
- tape and paper		No
- newsprint		No
Wrapping machines		Not all types

Source: Reported by a large newspaper publisher through the Canadian  
Daily Newspaper Publishers Association

APPENDIX C

IMPORTS OF PRINTED MATTER BY KINDS

AND SELECTED YEARS



Imports of printed matter by kinds and selected years

<u>Description</u>	<u>Tariff Item</u>	<u>1951</u>	<u>1955</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
			(T h o u s a n d s	o f d o l l a r s)			
<u>Newspapers and Magazines</u>							
<u>Newspaper or comic sections</u>							
Magazines, newspapers, unbound, n.o.p.							
18305-1			736	1,608	1,502	1,322	2,386
18310-1		261					
18400-1							
18405-1		20,172	26,504	33,479	35,788	37,732	
Sub-total		20,434	27,240	35,087	37,290	39,054	41,900(a)
<u>Books</u>							
Bibles, prayer books, hymn books		2,657	3,517	4,566	4,662	4,704	..
Blank books, ruled or plain		36	28	90	119	133	..
Books, over twelve years old		12	29	22	28	18	..
) 17305-1							
) 17310-1							
) 17315-1							
) 17320-1		3,646	4,103	12,709	13,004	12,656	..
) 17325-1							
) 17330-1							
<u>Textbooks, educational, &amp; directories for libraries</u>							
Books, pamphlets, and reports for promotion of science, law, medicine and surgery, and fine arts, tech. training, and the study of languages							
Books, novels or fiction							
17200-1		2,593	6,198	11,531	13,845	15,535	..
16900-1		252	159	250	403	705	..
) 17200-1							
) 17205-1							
) 70805-1		192	386	796	931	939	..
) 70810-1							
Books, government association							
Books, periodicals and pamphlets, n.o.p.							
Books, periodicals, except English language							
17100-1		6,783	9,989	13,774	15,667	15,286	..
17000-1		832	1,654	5,146	4,503	4,821	..
Sub-total		17,004	26,063	48,883	53,162	54,798	56,671(a)







APPENDIX D

FINANCIAL DATA PERTAINING TO THE  
PRINTING AND ALLIED INDUSTRIES

Notes Respecting Financial Statistics

- (a) Includes corporations only. The totals for small corporations are estimated from a sample. The sampling technique used for 1961 and 1962 was different than for other years
- (b) Excludes investments
- (c) Prior to 1960, includes corporations engaged in lithographing, offset printing, photogravure and rotogravure
- (d) After 1959, includes corporations engaged in lithographing, offset printing, photogravure and rotogravure

Source: Compiled from data published in Taxation Statistics by the Department of National Revenue

<u>Publishing and Printing Industry</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Number of profit companies	432	418	427	520	479	498	568	473
Number of loss companies	161	187	169	147	167	211	362	257
Current assets (b)	78.9	80.0	84.9	90.6	87.0	94.6	102.4	100.1
Fixed assets	171.7	184.8	195.4	225.4	235.5	255.1	288.0	286.5
Other assets (b)	20.6	24.9	30.4	37.9	34.8	30.6	33.3	32.7
Total assets before depreciation (b)	271.2	289.7	310.7	353.9	357.3	380.3	423.7	419.3
Less: accumulated depreciation (b)	80.4	84.7	77.9	91.7	103.6	117.4	129.2	129.1
Total assets after depreciation (b)	190.8	205.0	232.8	262.2	253.7	262.9	294.5	290.2
Add: investments	43.4	54.4	57.2	102.2	90.3	118.8	120.3	119.6
	234.2	259.4	290.0	364.4	344.0	381.7	414.8	409.8
Less: liabilities	90.5	112.6	133.5	163.8	149.9	156.5	180.8	184.9
Net worth	143.7	146.8	156.5	200.6	194.1	225.2	234.0	224.9
Net sales	349.9	368.2	371.5	443.0	437.3	444.5	489.4	479.7
Cost of goods sold	77.2	126.3	149.0	217.8	234.3	245.1	254.0	257.8
Gross profit	272.7	241.9	222.5	225.2	203.0	199.4	235.4	221.9
- as per cent of net sales	77.9%	65.7%	59.9%	50.8%	46.4%	44.9%	48.1%	46.3%
Other expenses (GP-NP)	238.8	211.0	190.1	184.2	164.1	162.3	197.4	185.8
Net profit before income tax	33.9	30.9	32.4	41.0	38.9	37.1	38.0	36.1
Add: investment income	1.5	1.4	1.5	2.8	2.5	4.4	6.0	9.8
Less: Dominion income tax	14.8	12.9	13.3	16.8	16.5	15.4	16.3	15.8
Net profit after income tax	20.6	19.4	20.6	27.0	24.9	26.1	27.7	30.1
- as per cent of net sales	5.9%	5.3%	5.5%	6.1%	5.7%	5.9%	5.7%	6.3%
- as per cent of net worth	14.3%	13.2%	13.2%	13.5%	12.8%	11.5%	11.8%	13.4%
<u>All Manufacturing</u>								
Gross profit as per cent of net sales	..	..	27.4%	26.5%	26.6%	26.2%	26.3%	26.1%
Net profit after income tax								
- as per cent of net sales	4.4%	3.9%	3.9%	4.2%	3.8%	4.1%	4.4%	4.3%
- as per cent of net worth	10.2%	8.9%	7.8%	8.6%	7.7%	7.7%	8.9%	8.8%



Engraving, Stereotyping and

(Millions of dollars, unless stated otherwise)

Allied Industries

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959(c)</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Number of profit companies	142	154	106	160	134	74	115	63
Number of loss companies	23	34	51	40	(b)	24	24	53
Current assets (b)	28.5	36.3	36.0	36.7	25.0	22.8	19.2	18.1
Fixed assets (b)	52.9	64.1	64.2	67.4	57.2	40.8	38.2	41.2
Other assets	2.3	3.9	2.3	3.4	2.0	5.2	1.5	1.4
Total assets before depreciation (b)	83.7	104.3	102.5	107.5	84.2	68.8	58.9	60.7
Less: accumulated depreciation	25.5	33.4	33.9	36.3	31.1	22.6	22.8	24.8
Total assets after depreciation (b)	58.2	70.9	68.6	71.2	53.1	46.2	36.1	35.9
Add: investments	14.7	17.3	19.1	18.7	19.2	17.9	20.1	25.3
Less: liabilities	72.9	88.2	87.7	89.9	72.3	64.1	56.2	61.2
Net worth	29.1	31.2	30.7	28.6	23.3	24.9	16.5	14.3
	43.8	57.0	57.0	61.3	49.0	39.2	39.7	46.9

## Net sales

Cost of goods sold

Gross profit

- as per cent of net sales

Net sales	105.3	123.0	120.2	132.1	97.1	66.1	69.2	66.0
Cost of goods sold	33.3	66.9	76.7	85.5	61.5	38.6	42.2	37.0
Gross profit	72.0	56.1	43.5	46.6	35.6	27.5	27.0	29.0
- as per cent of net sales	68.4%	45.6%	36.2%	35.3%	36.7%	41.6%	39.0%	43.9%

## Other expenses (GP-NP)

Net profit before income tax

Add: investment income

Less: Dominion income tax

Net profit after income tax

- as per cent of net sales

- as per cent of net worth

Other expenses	63.4	44.1	34.2	35.1	26.5	21.4	19.9	22.8
Net profit before income tax	8.6	12.0	9.3	11.5	9.1	6.1	7.1	6.2
Add: investment income	.4	.9	.6	.6	.8	.9	1.4	1.2
Less: Dominion income tax	3.7	4.3	3.4	4.4	3.6	2.5	2.6	2.4
Net profit after income tax	5.3	8.6	6.5	7.7	6.3	4.5	5.9	5.0
- as per cent of net sales	5.0%	7.0%	5.4%	5.8%	6.5%	6.8%	8.5%	7.6%
- as per cent of net worth	12.1%	15.1%	11.4%	12.6%	12.9%	11.5%	14.9%	10.7%

All Manufacturing

Gross profit as per cent of net sales

Net profit after income tax

- as per cent of net sales

- as per cent of net worth

Gross profit as per cent of net sales	..	..	27.4%	26.5%	26.6%	26.2%	26.3%	26.1%
Net profit after income tax	4.4%	3.9%	3.9%	4.2%	3.8%	4.1%	4.4%	4.3%
- as per cent of net sales	10.2%	8.9%	7.8%	8.6%	7.7%	7.7%	8.9%	8.8%

Commercial Printing Industry	1956	1957	1958	1959	1960	1961	1962	1963
	(d)							
Number of profit companies	571	518	553	655	579	654	659	784
Number of loss companies	99	124	189	185	345	364	363	311
Current assets (b)	58.1	52.2	52.1	66.0	63.3	97.5	89.9	109.9
Fixed assets (b)	85.5	74.7	90.2	113.3	116.0	187.5	166.0	197.9
Other assets	8.0	4.6	7.3	9.1	12.2	11.1	10.9	13.9
Total assets before depreciation (b)	151.6	131.5	149.6	188.4	191.5	296.1	266.8	321.7
Less: accumulated depreciation	42.9	36.5	45.5	58.7	59.2	103.9	88.8	107.9
Total assets after depreciation (b)	108.7	95.0	104.1	129.7	132.3	192.2	178.0	213.8
Add: investments	7.2	10.8	6.7	14.4	12.4	21.2	21.3	23.0
	115.9	105.8	110.8	144.1	144.7	213.4	199.3	236.8
Less: liabilities	52.6	48.3	49.0	68.7	70.1	95.4	87.2	111.8
Net worth	63.3	57.5	61.8	75.4	74.6	118.0	112.1	125.0
Net sales	192.0	182.2	178.0	229.9	238.1	344.4	298.8	374.4
Cost of goods sold	80.0	120.2	112.4	156.6	150.1	236.2	201.2	254.5
Gross profit	112.0	62.0	65.6	73.3	78.0	108.2	97.6	119.9
- as per cent of net sales	58.3%	34.0%	36.9%	31.9%	32.8%	31.4%	32.7%	32.0%
Other expenses (GP-NP)	102.5	52.5	57.9	64.3	67.1	95.1	85.4	107.1
Net profit before income tax	9.5	9.5	7.7	9.0	10.9	13.1	12.2	12.8
Add: investment income	.1	.3	.1	.4	.2	.3	.5	1.4
Less: Dominion income tax	3.5	2.8	2.2	3.1	3.8	4.5	4.4	4.5
Net profit after income tax	6.1	7.0	5.6	6.3	7.3	8.9	8.3	9.7
- as per cent of net sales	3.2%	3.8%	3.1%	2.7%	3.1%	2.6%	2.8%	2.6%
- as per cent of net worth	9.6%	12.2%	9.1%	8.4%	9.8%	7.5%	7.4%	7.8%
All Manufacturing								
Gross profit as per cent of net sales	..	..	27.4%	26.5%	26.6%	26.2%	26.3%	26.1%
Net profit after income tax								
- as per cent of net sales	4.4%	3.9%	3.9%	4.2%	3.8%	4.1%	4.4%	4.3%
- as per cent of net worth	10.2%	8.9%	7.8%	8.6%	7.7%	7.7%	8.9%	8.8%





APPENDIX E

CANADIAN PRODUCERS OF MACHINERY AND APPARATUS

INCLUDED IN REFERENCE 133

Canadian Producers of Machinery  
and Apparatus included in Reference 133

Name of CompanyProducts1. Printing Presses

Addressograph-Multigraph of Canada Limited, Toronto, Ont.	Offset presses
Ashton Press Mfg. Co. Ltd., Montreal, Que.	Offset presses
Black Clawson-Kennedy Ltd., Owen Sound, Ont.	Flexographic presses
Offset Press Mfg. Co. Ltd., Toronto, Ont.	Offset presses
South Channel Co., Nobel, Ont.	Stroud, Bridgeman book presses
Wean-McKay of Canada Limited, Galt, Ont.	Centromatic presses

2. Printing Press Parts

American Wringer Company, Division of Turnbull Elevator Limited, Farnham, Que.	Printers' rollers or replacement covers
Ault & Wiborg Co. of Canada Ltd., Toronto, Ont.	Printers' rollers or replacement covers
Bingham's, Samuel, Son (Canada) Corp. Ltd., Toronto, Ont.	Printers' rollers or replacement covers
Bush Roller Company Limited, Toronto, Ont.	Printers' rollers or replacement covers
Canadian Beaver Co. Ltd., Toronto, Ont.	Printers' rollers (rotogravure)
Clarke Roller & Rubber Limited, Toronto, Ont.	Printers' rollers or replacement covers
Columbia Printing Ink & Roller Co. Limited, Vancouver, B.C.	Printers' rollers or replacement covers

Dayton Rubber Co. (Canada) Ltd., Weston, Ont.	Printers' rollers or replacement covers
Dominion Rubber Co. Limited, Montreal, Que.	Printers' rollers or replacement covers
Gelderland Limited, Scarborough, Ont.	Printers' rollers
Huntington Rubber Mills of Canada Limited, Port Coquitlam, B.C.	Printers' rollers or replacement covers
Lion Rubber & Plastics Ltd., Montreal, Que.	Rubber rollers or replacement covers
Miner Rubber Company Limited, Granby, Que.	Offset Blankets & Blanketing
Neo-Modern Roll & Engraving Limited, Hamilton, Ont.	Flexographic and gra- vure engraved rollers
Perma-Flex Industries Limited, Toronto, Ont.	Printers' rollers or replacement covers
Precision Engraving Company Limited, Toronto, Ont.	Printers' rollers
Printcraft Supply Co., Montreal, Que.	Printers' rollers
J.S. Robertson Ltd., Montreal, Que.	Printers' rollers or replacement covers
R.J. West Limited, Weston, Ont.	Printers' rollers (steel)

### 3. Other Machinery and Equipment

Ashton Press Mfg. Co. Ltd., Montreal, Que.	Business form machines and apparatus
Black Clawson-Kennedy Ltd., Owen Sound, Ont.	Coating, slitting and rewinding machines
Burrowes Manufacturing Co., Toronto, Ont.	Light tables, cabinets, galleys, trucks and other printers' equipment



Canada Illinois Tools Limited, Toronto, Ont.	Knives, slitters, shears and cutters for machines
Canadian Vickers Industries Limited, Montreal, Que.	Rewinding machines
Dominion Engineering Works Limited, Montreal, Que.	Rewinding and coating machines and apparatus
Fluid Power Limited, Rexdale, Ont.	Hydraulic presses
Harrington Tool & Die Company Limited, Montreal, Que.	Routing and specialty machines
John Inglis Co. Limited, Toronto, Ont.	Rewinding machines
Master Mechanical Design Limited, Toronto, Ont.	Cutting machines
R. McDougall Co., Division of Upton, Bradeen and James Ltd., Galt, Ont.	Cutting machines
Offset Press Mfg. Co. Ltd., Toronto, Ont.	Business form machines and apparatus
Therm-A-Bind Limited, Toronto, Ont.	Bookbinding, jogging and collating machines and apparatus

---

Source: Based on **inquiries** by Board and **information** contained in the Canadian Trade Index.

APPENDIX F

CANADIAN FACTORY SHIPMENTS OF PRINCIPAL PAPER

AND PAPERBOARD PRODUCTS

BY SELECTED YEARS

Canadian Factory Shipments of Principal Paper and Paperboard  
Products, by Selected Years

<u>Products</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
				\$'000
Boxes, corrugated, folding, set-up and solid fibre board	220,872	224,177	232,925	254,047
Paper Bags, all kinds	62,351	63,463	64,228	67,752
Building Papers, all kinds	30,169	25,854	35,719	32,024
Tags, shipping and merchandise	25,262	25,779	27,791	29,457
Toilet Paper, packaged	24,613	25,773	25,864	28,064
Plastic Bags, all kinds	17,132	20,815	23,631	26,411
Tile, acoustic, asphalt, vinyl-asbestos and Tile Board, enamelled	16,076	18,075	22,007	24,427
Envelopes, manufactured (printed or not)	20,750	21,457	21,341	22,612
Cards, greeting, playing and visiting	16,927	19,000	18,960	22,158
Building Wood Fibre Boards, all kinds	29,201	27,736	18,160	21,427
Waxed Paper (printed or plain), all kinds	18,150	18,651	19,019	19,172
Paper, coated, n.e.s.	13,880	18,413	17,683	17,571
Napkins, paper and sanitary	15,417	15,825	16,501	17,195
Tissue, wrapping and facial, including paper handkerchiefs	16,043	14,426	15,295	16,444
Cups, drinking, baking and food packaging	10,711	10,783	10,305	12,449
Towels, paper, packaging	5,044	6,593	7,950	7,993
Scribblers, note books and exercise books	5,740	7,114	8,079	7,724
Bottles, milk, paper	6,408	6,751	7,141	7,656
Tape, gummed all kinds and telegraph and ticker	5,950	6,356	6,819	6,843
Blueprint and other reproduction paper	6,637	6,866	5,805	6,425
Wrappers, other than waxed and printed	8,479	7,316	8,167	6,027
Other Principal Paper and Paperboard Products	50,411	63,931	71,483	86,175
Total	626,223	655,154	684,873	740,053

Source: D.B.S. Cat. Nos. 31-201, 31-211 and 36-201



APPENDIX G

TARIFF HISTORY

Tariff HistoryTariff Item 30200-1 (GATT) - Previously 302

Lithographic stones, not engraved

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1956, June 30 (GATT)		15 p.c.	
1930, May 2	Free	17½ p.c.	20 p.c.

Tariff Item 34000-1 (GATT) - Previously 340

Type for printing, including chases, quoins and slugs, of all kinds

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1948, January 1 (GATT)		17½ p.c.	
1932, October 13	7½ p.c.	17½ p.c.	20 p.c.
1906, November 30	12½ p.c.	17½ p.c.	20 p.c.

Tariff Item 34100-1 (GATT) - Previously 341

Babbit metal and type metal, in blocks, bars, plates and sheets

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1948, January 1 (GATT)		20 p.c.	
1932, October 13	10 p.c.	20 p.c.	20 p.c.
1906, November 30	10 p.c.	15 p.c.	15 p.c.

Tariff Item 34610-1 (GATT) - Previously 346b

... zinc strip or sheet, ungrained, whether or not ground, for making offset plates for lithographing; zinc strip or sheet, not planished, ground or polished, coated on one side with acid-resisting material, to be prepared for use in photo-engraving; all the foregoing if containing not more than ten per cent by weight of other metal or metals

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1958, June 18	Free	Free	10 p.c.

(a) Prior to June 18, 1958, the zinc strip or sheet, if not ground or grained for making offset plates for lithographing, was dutiable under tariff item 345, viz: Zinc dust, strip and sheets; zinc plates for marine boilers; sal ammoniac skimmings and seamless drawn tubing of zinc (item struck out June 18, 1958)

1948, January 1 (GATT)		Free	
1939, January 1 (United States Trade Agreement)		Free	
1930, May 2	Free	Free	Free

Zinc strip or sheet ground or grained was dutiable under tariff item 346. (See listing of tariff item in (b))

(b) Prior to June 18, 1958 the zinc strip or sheet, not planished, ground or polished, coated on one side with acid-resisting material, to be prepared for use in photo-engraving was dutiable under tariff item 346c, viz.:— Zinc sheets, not planished, ground or polished, coated on one side with acid-resisting material, imported by planishers, grinders or polishers of zinc sheets to be used exclusively in the planishing, grinding, polishing or other processing of such sheets, ready for use by photo engravers (item struck out June 18, 1958)

1952, April 9	Free	Free	25 p.c.
1951, June 6 (GATT)		Free	
1948, September 1 (Order in Council)	Free	Free	25 p.c.

Prior to September 1, 1948 the goods were dutiable under tariff item 346, viz.:— Zinc, manufactures of, n.o.p.

1948, January 1 (GATT)		17½ p.c.	
1939, January 1 (United States Trade Agreement)		20 p.c.	
1906, November 30	15 p.c.	22½ p.c.	25 p.c.

Tariff Item 41200-1 - Previously 412

Printing presses, of a class or kind not made in Canada, for use in the printing of newspapers, telephone directories or periodical publications which, if imported, would qualify for entry under tariff item 18405-1, and parts thereof, not to include saws, knives and motive power; mechanical deliveries or conveyors, and parts thereof, for use with the foregoing printing presses

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1953, February 20	Free	Free	Free

Prior to February 20, 1953 the item was as follows:— Machinery, being presses for use in the printing of newspapers and telephone directories, of not less value by retail than fifteen hundred dollars each, of a class or kind not made in Canada, and complete parts thereof, not to include saws, knives and motive power; mechanical deliveries or conveyors for use with newspaper printing presses.

Printing presses for periodical publications were classified under tariff items 412b or 412d (see histories of tariff items 41210-1 and 41020-1). Mechanical deliveries or conveyors for use with printing presses, as above, for telephone directories and periodical publications were dutiable under item 427.

1948, May 19	Free	Free	Free
--------------	------	------	------

Prior to May 19, 1948 the item did not include printing presses for telephone directories. These goods were classified under tariff items 412b or 412d (see histories of tariff items 41210-1 and 41220-1).



1936, May 2

Free

Free

Free

Prior to May 2, 1936, the item did not provide for mechanical deliveries or conveyors for use with newspaper printing presses. These goods were classified under tariff item 427.

1934, April 19

Free

Free

Free

Prior to April 19, 1934 the item did not provide for complete parts, not to include saws, knives and motive power for printing presses. These goods were classified under tariff items 412b or 412d (see histories of tariff items 41210-1 and 41220-1).

1931, June 2

Free

Free

Free

Prior to June 2, 1931 the item was worded as follows:-  
Machinery, being newspaper printing presses, of not less value by retail than \$1,500 each, of a class or kind not made in Canada

1930, May 2

Free

Free

Free

Tariff Item 41205-1 (GATT) - Previously 412a

Machinery and apparatus, n.o.p., viz:

Gun and mould apparatus for making press rollers;

Machines and apparatus for making electrotypes and stereotypes;

Engraving machines and apparatus, including photo-engraving apparatus, and other plate-making apparatus, used in the manufacture of printing plates of all kinds;

Machines and apparatus for graining metal plates;

Machines and apparatus for sensitizing, grinding or polishing metal plates;

Machines and apparatus including cameras and camera equipment, lens, prisms, camera and printing lamps, screens, and vacuum frames, for transferring by photographic processes, or direct, to plates or rolls for use in lithography, rotogravure and printing;

Shading apparatus;

Machines and apparatus for addressing and/or wrapping newspapers, magazines, periodicals, pamphlets and catalogues;

Machines and apparatus for embossing or stamping or producing embossed or engraved effects, bookbinding, looping, stitching, sewing, gathering, inserting, bronzing, dusting, creasing, scoring, cutting, perforating, drilling, punching, slitting, rewinding, glueing, pasting, gumming, waxing, varnishing, carbon coating, patching, numbering, ruling, jogging, sheet piling, tying, bundling, tube-making, metal mounting, eyeletting, staying or stripping, reinforcing and box covering;

Parts of the foregoing not to include saws, knives and motive power;

All the foregoing, when for use exclusively by, and in their capacities as printers, lithographers, bookbinders, manufacturers of stereotypes, electrotypes and printing plates or rolls, paper or foil converters, or by manufacturers of articles made from paper, cardboard or foil

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1953, February 20	Free	Free	10 p.c.

Prior to February 20, 1953 the item did not provide for foil manufacturers or foil converters in its end use provision. Such machines and apparatus as listed in the item, when used by foil manufacturers or converters were classified mainly under tariff item 427a.

1948, January 1 (GATT)		Free	
1939, January 1 (United States Trade Agreement)		Free	
1936, May 2	Free	Free	10 p.c.

Prior to May 2, 1936 the item was as follows:-

Machinery and apparatus, n.o.p., viz.: gun and mould apparatus for making press rollers; machines and apparatus for making electrotypes and stereotypes, engraving machines, photoengraving apparatus, machines for graining metal plates, machines for sensitizing metal plates, machines and apparatus for transferring by photographic processes to plates or rolls for use in lithography, rotogravure and printing, machines for addressing or wrapping newspapers, magazines, periodicals, pamphlets and catalogues, and machines for embossing, book-binding, bronzing, creasing, scoring, cutting, perforating, punching, gathering, gumming, pasting, jogging, numbering, patching, slitting, rewinding, ruling, sheet-piling, stitching, stripping or varnishing, when for use exclusively by printers, book-binders, manufacturers of stereotypes, electrotypes and printing plates or rolls, paper converters and by manufacturers of articles made from paper or cardboard; and complete parts of all the foregoing, not to include saws, knives, and motive power.

There were many goods which were allowed entry under the wording of tariff item 412a on and after May 2, 1936 but which were not provided for under the above wording; they were classified under a variety of tariff items. Most of the machines, however, were admissible under tariff item 427a.

1932, October 13	Free	5 p.c.	10 p.c.
------------------	------	--------	---------

Prior to October 13, 1932 the item also provided for printing presses and type-making accessories therefor as well as lithographic presses and offset presses, n.o.p. Manufacturers of stereotypes, electrotypes and printing plates or rolls were not listed under the end use provision of the item thus the goods they used in the production of printing plates were classified according to their nature under a variety of tariff items.

1930, May 2	Free	5 p.c.	10 p.c.
-------------	------	--------	---------

Tariff Item 41210-1 (GATT) - Previously 412b

Flat bed cylinder printing presses, to print sheets of a size 25 by 38 inches or larger, and complete parts thereof; machines designed to fold or sheet-feed paper or cardboard, and complete parts thereof



	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1948, January 1 (GATT)		10 p.c.	
1939, January 1 (United States Trade Agreement)		10 p.c.	
1932, October 13	Free	10 p.c.	15 p.c.
1930, May 2	Free	5 p.c.	10 p.c.

Tariff Item 41215-1 (GATT) - Previously 412c

Typesetting and typesetting machines and parts thereof for use in printing offices

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1948, January 1 (GATT)		Free	
1939, January 1 (United States Trade Agreement)		Free	
1930, May 2	Free	Free	Free

Tariff Item 41220-1 (GATT) - Previously 412d

Offset presses; lithographic presses; printing presses and typemaking accessories therefor, n.o.p.; complete parts of the foregoing, not to include saws, knives and motive power

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1948, January 1 (GATT)		10 p.c.	
1939, January 1 (United States Trade Agreement)		10 p.c.	
1932, October 13	Free	10 p.c.	15 p.c.

Prior to October 13, 1932 the goods were classified under tariff item 412a (see history of tariff item 41205-1).

Tariff Item 41225-1 - Previously 412e

Articles and materials which enter into the construction and form part of the machines and apparatus provided for in tariff item 41205-1, when imported by manufacturers of such machines, apparatus and parts thereof, for use exclusively in the manufacture of such goods in their own factories under such regulations as the Minister may prescribe

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1948, May 19	Free	Free	Free

Prior to May 19, 1948 the goods were dutiable under a variety of tariff items, according to their nature or composition



Tariff Item 47200-1 - Previously 472

Plates, rolls and cylinders engraved on wood, or on steel or other metal, and transfers taken from same, n.o.p.; engravers' plates, rolls and cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1934, April 19	10 p.c.	15 p.c.	20 p.c.

Prior to April 19, 1934 the item was as follows:-

Plates engraved on wood, steel or other metal and transfers taken from the same, n.o.p.; engravers' plates of steel, or other metal, polished or otherwise processed, for engraving thereon

Rolls or cylinders engraved on wood, or on steel or other metal, were classified as parts of the machine on which they were used, mostly under tariff item 412d. Rolls or cylinders of steel or other metal, polished or otherwise processed, for engraving thereon or for transferring thereto from engraved plates were classified according to material and finish.

1930, May 2	10 p.c.	15 p.c.	20 p.c.
-------------	---------	---------	---------

Tariff Item 47300-1 - Previously 473

Plates for printing in two or more colours, including electrotypes, nickeltypes and all engravings on steel or other metal, for use exclusively in printing, n.o.p.

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1936, May 2	Free	15 p.c.	20 p.c.

Prior to May 2, 1936 the description excluded the letters "n.o.p." The letters were introduced to allow for tariff item 473a (see history of tariff item 47305-1).

1930, May 2	Free	15 p.c.	20 p.c.
-------------	------	---------	---------

Tariff Item 47305-1 - Previously 473a

Printing plates of all kinds for periodical publications enjoying second-class mailing privileges, the pages of which are regularly bound, wire-stitched or otherwise fastened together, and matrices, metal bases and copper shells therefor, but not to include printing plates and other articles covered by tariff item 47500-1

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1937, February 26	Free	Free	25 p.c.
1936, May 2	Free	7½ p.c.	25 p.c.

Prior to May 2, 1936, the goods were classified, mostly under tariff items 472, 473 and 474 (see histories of tariff items 47200-1, 47300-1 and 47400-1).

Tariff Item 47400-1 (GATT) - Previously 474

Stereotypes, electrotypes and celluloids, for almanacs, calendars, illustrated pamphlets, newspaper or other advertisements, n.o.p.; and matrices or copper shells for such stereotypes, electrotypes and celluloids

	<u>B.P.</u>	<u>M.F.N.</u> (per square inch)	<u>General</u>
1951, June 6 (GATT)		1 ct.	
1930, May 2	1 ct.	1 $\frac{1}{4}$ cts.	1 $\frac{1}{2}$ cts.

Tariff Item 47500-1 - Previously 475

Stereotypes, electrotypes, rubber plates and celluloids for books, and bases and matrices and copper shells for such printing plates; positive and negative films of periodical publications regularly issued at stated intervals as frequently as, at least, four times a year, not including catalogues

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1951, April 11	Free	Free	Free

Prior to April 11, 1951 the item did not provide for rubber plates for books nor for bases and matrices of such printing plates. These goods were classified under item 473 (see history of tariff item 47300-1) or according to material and finish.

1934, April 19	Free	Free	Free
----------------	------	------	------

Prior to April 19, 1934 the item was as follows:-  
Stereotypes, electrotypes and celluloids of books, and bases and matrices and copper shells for the same, whether composed wholly or in part of metal or celluloid; positive and negative films of books.

Positive and negative films of periodical publications were classified under tariff item 472 as transfers (see history of tariff item 47200-1).

1933, March 22	Free	Free	Free
----------------	------	------	------

Prior to March 22, 1933 the item did not provide for positive and negative films of books. These goods were classified under tariff item 472 as transfers (see history of tariff item 47200-1).

1930, May 2	Free	Free	Free
-------------	------	------	------

Tariff Item 47505-1 - Previously 475a

Stereotypes, electrotypes, celluloids and bases for the same, composed wholly or in part of metal or celluloid, n.o.p., and copper shells for such stereotypes, electrotypes and celluloids

	<u>B.P.</u>	<u>M.F.N.</u> (per square inch)	<u>General</u>
1930, May 2	1/8 ct.	1/8 ct.	1/8 ct.

Tariff Item 47510-1 (GATT) - Previously 475b

Matrices for stereotypes, electrotypes and celluloids described in item 47505-1

	<u>B.P.</u>	<u>M.F.N.</u> (per square inch)	<u>General</u>
1948, January 1 (GATT)		$\frac{1}{2}$ ct.	
1935, March 23	Free	$\frac{1}{2}$ ct.	$\frac{1}{2}$ ct.
1930, May 2	$\frac{1}{2}$ ct.	$\frac{1}{2}$ ct.	$\frac{1}{2}$ ct.

Tariff Item 47515-1 (GATT) - Previously 475c

Plates and electrotypes of metal and positive and negative films, for printing music

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1962, July 1 (GATT)		Free	
1961, June 21	Free	Free	Free

Prior to June 21, 1961 the item did not provide for positive and negative films; they were classified under tariff item 472 as transfers (see history of tariff item 47200-1).

1931, June 2	Free	Free	Free
--------------	------	------	------

Prior to June 2, 1931 the goods were classified under tariff items 472 or 475a (see history of tariff items 47200-1 and 47505-1).

Tariff Item 47520-1 - Previously 475d

Printing plates, n.o.p., whether for printing or lithographing, and transfers taken from same, and positive and negative films, for use exclusively in the production of books which are included in the curriculum of any university, college or school in Canada, for use as text books or as works of reference, not to include dictionaries

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1944, June 27	Free	Free	Free



Prior to June 27, 1944 the goods were classified under tariff items 472, 473 or 475 (see tariff history of tariff items 47200-1, 47300-1 and 47500-1).

Tariff Item 47525-1 - Previously 475e

Matrices of non-advertising news pictures for reproduction in newspapers and periodical publications enjoying second-class mailing privileges

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1946, June 28	Free	Free	Free

Prior to June 28, 1946 the goods were classified mainly under tariff items 473a and 475b (see histories of tariff items 47305-1 and 47510-1).

Tariff Item 53415-1 (GATT) - Previously 534b

Press blankets or blanketing for use with printing presses and stereotypers' and typecasters' blankets or blanketing, of a class or kind not made in Canada

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1961, June 21	Free	5 p.c.	10 p.c.

Prior to June 21, 1961 this item was numbered 538h

1960, April 1	Free	5 p.c.	10 p.c.
---------------	------	--------	---------

Prior to April 1, 1960 this item was numbered 553a

1948, January 1 (GATT)		5 p.c.	
1930, May 2	Free	5 p.c.	10 p.c.

Tariff Item 66000-1 - Previously 660

Moulding material consisting of a mixture of synthetic rubber and wax with a backing of aluminum not exceeding .006 inch in thickness, for use by electrotypers in the manufacture of electrotypes

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1952, April 9	Free	7½ p.c.	30 p.c.

Prior to April 9, 1952 the goods were dutiable under tariff item 354 viz:- Manufactures of aluminum, n.o.p.

1948, January 1 (GATT)		22½ p.c.	
1939, January 1 (United States Trade Agreement)		27½ p.c.	
1932, October 13	15 p.c.	30 p.c.	30 p.c.
1906, November 30	15 p.c.	22½ p.c.	25 p.c.

Tariff Item 66005-1 (GATT) - Previously 660a

Synthetic resin or cellulose plastic sheets or plates, coated or not, with or without turned edges, for the production of engravings for use by printers

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1954, April 7	Free	7½ p.c.	30 p.c.

Prior to April 7, 1954 the item was as follows:-  
Cellulose nitrate sheets with turned edges, for the production of engravings for use by printers.

The synthetic resin and other plastic materials were classified according to their nature or composition.

1952, April 9	Free	7½ p.c.	30 p.c.
---------------	------	---------	---------

Prior to April 9, 1952, the cellulose nitrate sheets with turned edges were classified according to their nature or composition.

Tariff Item 66010-1 - Previously 660b

Plates, curved or not, consisting of a layer of cellulose plastic composition and metal, coated or not, for the production of printing plates (expires 31st October, 1966)

	<u>B.P.</u>	<u>M.F.N.</u>	<u>General</u>
1965, November 1 (expires 31st October 1966)	10 p.c.	10 p.c.	30 p.c.
1964, November 1 (expired 31st October 1965)	10 p.c.	10 p.c.	30 p.c.
1963, November 1 (expired 31st October 1964)	10 p.c.	10 p.c.	30 p.c.
1963, February 1 (expired 31st October 1963)	7½ p.c.	7½ p.c.	30 p.c.
1962, February 1 (expired 31st January 1963)	7½ p.c.	7½ p.c.	30 p.c.

Prior to February 1, 1962 the goods were classified according to their nature or composition.



























3 1761 11549391 8